DEPARTMENT OF THE ARMY
KANSAS CITY DISTRICT, CORPS OF ENGINEERS
700 FEDERAL BUILDING
KANSAS CITY, MISSOURI 64106-2896

REPLY TO
ATTENTION OF:

May 28, 2008

Planning, Programs and Project Management Division
Planning Branch

NOTICE OF AVAILABILITY

An Environmental Assessment titled, Henrietta-Crooked River Levee 7 Drainage District, Section 1 and Ray-Lafayette Levee District No. 1, Non-Federal, Emergency Levee Rehabilitation Project, Emergency Levee Rehabilitation Project, and a draft Finding of No Significant Impact (FONSI) prepared by the U.S. Army Corps of Engineers, Kansas City, are available for your review on the project's website at: http:// www.nwk.usace.army.mil.

The Kansas City District – U.S. Army Corps of Engineers, in cooperation with the project sponsor, Henrietta-Crooked River Levee Drainage District and Ray-Lafayette Levee District No. 1 of Ray and Lafayette Counties, propose to construct the Henrietta-Crooked River Levee 7 Drainage District, Section 1 and Ray-Lafayette Levee District No. 1 Levee District Levee Rehabilitation Project under the authority of Public Law 84-99, of the Flood Control Act of 1944. Under this authority, the Corps of Engineers can provide assistance to public agencies in responding to flood emergencies such as the rehabilitation of flood control works damaged or destroyed by floods.

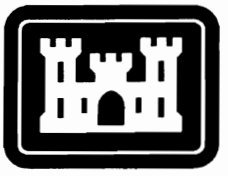
The project area is located in Ray and Lafayette Counties, Missouri along the left descending bank of the Missouri River, between river miles 326.2 to 313.7. The proposed project would involve repairs to a damaged drainage structure and damaged sod cover at various locations along the levee. Repairs are required as a result of the flood event declared on May 6, 2007.

Copies of the EA and the draft FONSI are also available by contacting Mr. Neil Bass; U.S. Army Corps of Engineers; PM-PR, 601 E. 12th St, Kansas City, Missouri, 64106; to request a copy in writing, at (816) 389-3667 to request a copy by phone, or at neil.bass@usace.army.mil to request a copy by e-mail.

The public review and comment period for the EA and draft FONSI will end 30 days from the date of this letter.

Sincerely,

David R. Hibbs
Acting Chief, Environmental Resource Section



US Army Corps
of Engineers
Kansas City District

KANSAS CITY DISTRICT
CORPS OF ENGINEERS
and
HENRIETTA-CROOKED RIVER LEVEE DRAINAGE DISTRICT
RAY-LAFAYETTE LEVEE DISTRICT NO. 1

Public Law 84-99 of the Flood Control Act of 1944
Levee Rehabilitation – NEPA Review, Environmental
Assessment & Finding of No Significant Impact

HENRIETTA-CROOKED RIVER LEVEE 7 DRAINAGE DISTRICT, SECTION 1 AND RAY-LAFAYETTE LEVEE DISTRICT NO. 1, NON-FEDERAL, EMERGENCY LEVEE REHABILITATION PROJECT

Ray and Lafayette
Counties, Missouri

May 2008

DEPARTMENT OF THE ARMY
KANSAS CITY DISTRICT, CORPS OF ENGINEERS
700 FEDERAL BUILDING
KANSAS CITY, MISSOURI 64106-2896

Draft Finding of No Significant Impact

HENRIETTA-CROOKED RIVER LEVEE 7 DRAINAGE DISTRICT, SECTION 1 AND RAY-LAFAYETTE LEVEE DISTRICT NO. 1, NON-FEDERAL, EMERGENCY LEVEE REHABILITATION PROJECT

May 2008

Project Summary

The U.S. Army Corps of Engineers, (USACE) Kansas City District, in cooperation with the project sponsor, Henrietta-Crooked River Levee Drainage District and Ray-Lafayette Levee District No. 1, of Ray and Lafayette Counties, Missouri, proposes to rehabilitate portions of the Levee System that were damaged during the May 2007 flood event under the authority of Public Law 84-99 of the Flood Control Act of 1944. The project areas are located in Ray and Lafayette Counties, Missouri. The Ray-Lafayette project area of the levee is located in Ray and Lafayette County along the left descending bank of the Missouri River, between river miles 326.2 to 313.7, and along the left descending bank of Brady Creek (Scone Branch Creek). The Henrietta-Crooked River project area of the levee is located in Ray County along the right descending bank of Crooked River. The proposed project would involve repairing a damaged drainage structure and damaged sod cover at various locations along the levee.

Alternatives

The three alternatives considered consist of: **Recommended Plan-**Relocation of damaged structure with slight levee setback and seeding of landside and riverside slopes. **Alternative 1-** In-place repair of damaged structure and the **No Action- Alternative**.

Recommended plan: This repair action would consist of relocating the drainage structure approximately 75' downstream of its present location to station 64+45. This action would require a slight landward shift in levee embankment to install a new pipe that would be aligned with flow-way pattern of interior drainage ditch. In addition, some minor ditch excavation would be required at both the inlet and outlet pipe ends and an existing landside farm service road would require relocating. The new drainage structure would be an 84-inch reinforced concrete pipe. The damaged drainage structure would be completely removed (along with present outlet steel frame support) or, end pipe sections removed and capped shut with concrete and levee embankment backfilled with impervious materials. In addition, all stone products utilized during Sponsor conducted flood fight activities would be salvaged and placed along the

riverside levee toe line or outlet drainage ditch. In addition, the recommended plan would involve seeding the damaged sod covers at various locations along the levee (riverside at station 222+34 to 555+00; riverside at station 52+44 to 190+83; and landside at station 63+85 to 190+83).

Borrow Areas: Approximately 75% of the required borrow would be obtained by degrading of the existing levee embankment riverward of the new landward shift. The remaining borrow (approximately 0.9 ac) would be obtained from excavation of a landside drainage ditch. Should additional borrow be required, it would be obtained from alongside an existing post-1993 riverward scour feature. All designated borrow locations are positioned within previously "environmentally cleared" borrow locations assessed during the 1993 repair actions.

Alternative 1: (In-place Repair): This repair action would consist of removal of the damaged pipes and replacement of piping within its current location and seeding of damaged slopes. In addition, all stone products utilized during Sponsor conducted flood fight operations would be salvaged and placed along the riverside levee toe line.

No-Action Alternative- Under the no-action alternative, the USACE would not repair the damage to the levee caused by the May 2007 flood event.

Summary of Environmental Impacts

The flood risk management level achieved by the recommended plan would be the same as the original pre-flood levees. The proposed action would involve restoring agricultural levees damaged during the May 2007 flood to their pre-protection levels. This project would result in short-term, minor construction related adverse impacts to water quality resulting from site runoff and increased turbidity. In addition, a few small trees and shrubs along the drainage ditch may be removed during borrow fill operations; however, natural plant succession should provide adequate re-vegetation of the impacted area. Beneficial impacts to the aquatic system would occur from the expansion of riverward scour area during borrow fill acquisition, which would provide increased wetland habitat for fish and wildlife. The proposed action would have no impact to sites listed on or eligible for inclusion on the National Register of Historic Places or threatened and endangered species. Overall, the minor impacts associated with this project are outweighed by the long-term social and economic benefits.

Mitigation Measures

The recommended plan would result in the expansion of an existing scour hole 'wetland area' located adjacent to Crooked River from the excavation of fill material. The borrow operations would create additional shallow water habitat adjacent to the existing riverward scour features and increased floodplain.

The identification of borrow sites was completed in accordance with the Standard Operating Procedures for the Selection of Borrow Sites Missouri River and Tributaries 1995 Levee Repair (Appendix II). These guidelines were developed through coordination with the U.S. Fish and Wildlife Service (USFWS) and the Missouri Department of Conservation (MDC) to avoid and/or

minimize adverse impacts to the aquatic ecosystem to the greatest extent practicable, and where possible, take advantage of the borrow acquisition activity to enhance the aquatic ecosystem. Clearing of early successional woody vegetation and excavation which removes accumulated silt from existing wetlands and scours are considered beneficial and will enhance the overall function and value of the aquatic ecosystem. The USACE has determined in coordination with MDC and the USFWS that natural plant succession should provide adequate re-vegetation of non mast producing trees. Borrow activities which expands existing scour holes increases their function and value. As the proposed borrow activity within the previously used scour hole/wetland has been designed to enhance the functions and values of the aquatic ecosystem, no mitigation is proposed.

Public Availability

Prior to a decision on whether to prepare an Environmental Impact Statement, the USACE circulated a Notice of Availability (Notice) of the Environmental Assessment (EA) and Draft Finding of No Significant Impact (FONSI), dated _____, 2008, with a thirty-day comment period ending on _____, 2008 to the public and resource agencies. The Notice was e-mailed to individuals/agencies/businesses listed on CENWK-Regulatory Branch's e-mail mailing list. The Notice informed these individuals that the EA and Draft FONSI were available on the CENWK webpage or that they could request a hard copy of the EA and Draft FONSI in order to provide comment.

Levee rehabilitation projects completed by the Corps under authority of Public Law 84-99 generally do not require the preparation of an Environmental Impact Statement. These projects typically result in long-term social and economic benefits and the adverse environmental effects are typically minor/long-term and minor/short-term construction related. Minor long-term impacts associated with these projects are typically well outweighed by the overall long-term social and economic benefits of these projects. As described above, the recommended plan is consistent with this assessment of typical levee rehabilitation projects completed by the Corps under authority of Public Law 84-99 of the Flood Control Act of 1944.

Conclusion

After evaluating the anticipated environmental, economic, and social effects of the proposed activity, it is my determination that construction of the proposed Rehabilitation Project to restore vegetation and relocate and repair the drainage structure that was damaged during the May 2007 flood event, does not constitute a major Federal action that would significantly affect the quality of the human environment; therefore, preparation of an Environmental Impact Statement is not required.

Date: _____

_____

Roger A. Wilson, Jr.
Colonel, Corps of Engineers
District Commander

DEPARTMENT OF THE ARMY
KANSAS CITY DISTRICT, CORPS OF ENGINEERS
700 FEDERAL BUILDING
KANSAS CITY, MISSOURI 64106-2896

EXECUTIVE SUMMARY

The U.S. Army Corps of Engineers, (USACE) Kansas City District, in cooperation with the project sponsor, Henrietta-Crooked River Levee Drainage District and Ray-Lafayette Levee District No. 1, of Ray and Lafayette Counties, Missouri, proposes to rehabilitate portions of the Levee System that were damaged during the May 2007 flood event under the authority of Public Law 84-99 of the Flood Control Act of 1944. The project areas are located in Ray and Lafayette Counties, Missouri. The Ray-Lafayette project area of the levee is located in Ray and Lafayette County along the left descending bank of the Missouri River, between river miles 326.2 to 313.7, and along the left descending bank of Brady Creek (Scone Branch Creek). The Henrietta-Crooked River project area of the levee is located in Ray County along the right descending bank of Crooked River. The proposed project would involve repairing a damaged drainage structure and damaged sod cover at various locations along the levee.

This project would result in short-term, minor construction related adverse impacts to water quality resulting from site runoff and increased turbidity. In addition, a few small trees and shrubs along the drainage ditch may be removed during borrow fill operations, however, natural plant succession should provide adequate re-vegetation of the impacted area. Beneficial impacts to the aquatic system would occur from the expansion of riverward scour area during borrow fill acquisition which would provide increased wetland habitat for fish and wildlife. The proposed action would have no impact to sites listed on or eligible for inclusion on the National Register of Historic Places or threatened and endangered species. Overall, the minor, impacts associated with this project are outweighed by the long-term social and economic benefits.

Prior to a decision on whether to prepare an Environmental Impact Statement, the USACE circulated a Notice of Availability (Notice) of the Environmental Assessment (EA) and Draft Finding of No Significant Impact (FONSI), dated _____, 2008, with a thirty-day comment period ending on _____, 2008 to the public and resource agencies. The Notice was e-mailed to individuals/agencies/businesses listed on USACE Regulatory e-mail mailing list. The Notice informed these individuals that the EA and Draft FONSI were available on the USACE webpage for review or that they could request the EA and Draft FONSI in writing, in order to provide comment.

Additional information concerning this project may be obtained from Ms. Lekesha Reynolds, Environmental Resources Specialist, PM-PR, Kansas City District - U.S. Army Corps of Engineers, by writing the above address, or by telephone at 816-389-3160.

NEPA REVIEW
ENVIRONMENTAL ASSESSMENT
&
FINDING OF NO SIGNIFICANT IMPACT

HENRIETTA-CROOKED RIVER LEVEE 7 DRAINAGE DISTRICT, SECTION 1 AND RAY-LAFAYETTE LEVEE DISTRICT NO. 1, NON-FEDERAL, EMERGENCYLEVEE REHABILITATION PROJECT

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NEPA REVIEW
ENVIRONMENTAL ASSESSMENT
&
FINDING OF NO SIGNIFICANT IMPACT

HENRIETTA-CROOKED RIVER LEVEE 7 DRAINAGE DISTRICT, SECTION 1 AND RAY-LAFAYETTE LEVEE DISTRICT NO. 1, NON-FEDERAL, EMERGENCY LEVEE REHABILITATION PROJECT
RAY AND LAFAYETTE COUNTIES, MISSOURI
MAY 2008

Section 1: INTRODUCTION

This Environmental Assessment provides information that was developed during the National Environmental Policy Act (NEPA) public interest review of the proposed Henrietta-Crooked River Levee Seven Drainage District, Section 1 and Ray-Lafayette Levee Drainage District, No. 1, Non-Federal, Emergency Levee Rehabilitation Project.

Section 2: AUTHORITY

The Kansas City District – U.S. Army Corps of Engineers (USACE), in cooperation with the project sponsors, Ray-Lafayette Levee District No. 1 and Henrietta-Crooked River Levee & Drainage District Section 1, propose to construct the levee rehabilitation project under the authority of Public Law 84-99 of the Flood Control Act of 1944.

Section 3: PROJECT LOCATION

The project area is located in the counties of Ray and Lafayette, Missouri. The Ray-Lafayette Levee District No. 1 segment is located along the left descending bank of the Missouri River, between river miles 326.2 to 313.7 and the left descending bank of Brady Creek (Scone Branch Creek). The Henrietta-Crooked River levee segment is located along the right descending bank of Crooked River.

Section 4: GENERAL DESCRIPTION

The Ray-Lafayette Levee District No. 1 segment is approximately 81,531 linear feet of earthen FCW and the Henrietta-Crooked River levee, Section one, segment is approximately 19,083 linear feet of earthen FCW. The combined levee system protects approximately 27,127 acres of agricultural lands (total within this taxation district is 19,627 acres), approximately 26,100 acres is in cropland (total within this taxation district is 18,600 acres), portions of the town of Henrietta, 45 residences, 6 businesses, 80 machine sheds, 11 irrigation systems, 65 grain bins, approximately 10 miles of State Highway Route 13 and J, approximately 30 miles of State

Highway Route J, approximately 19 miles gravel surfaced County roads and 10 miles of unimproved farm to market roads, approximately 20 miles of overhead power lines, approximately 8 miles of Sprint fiber optics and numerous miles of overhead power lines and other utility lines, approximately 7 miles of railroad embankment, Lexington Municipal Airport with associated buildings, sand plant operation/facilities, approximately 30 RV's at Sunshine Lake, 11 upright silos, two grain dryers and 4 pumping plants.

Section 5: PROJECT DAMAGES

During the May 2007 flood event, severe damages to the levee unit occurred. The project damages consist of loss of vegetative cover on various areas of the levees riverside and landside slopes and damage to the Henrietta-Crooked River drainage structure.

Section 6: PURPOSE & NEED FOR ACTION

The project purpose and need is to rehabilitate the damaged levees and restore the associated social and economic benefits. Repair of the levee would restore an estimated level of protection in excess of 10 years.

Section 7: ALTERNATIVES

The three alternatives considered consist of: **Recommended Plan-**Relocation of damaged structure with slight levee setback and seeding of landside and riverside slopes. **Alternative 1-** In-place repair of damaged structure and the **No Action- Alternative**.

Recommended plan: This repair action would consist of relocating the drainage structure approximately 75 feet downstream of its present location to station 64+45. This action would require a slight landward shift in levee embankment to install a new pipe that would be aligned with flow-way pattern of interior drainage ditch. In addition, some minor ditch excavation would be required at both the inlet and outlet pipe ends and an existing landside farm service road would require relocating. The new drainage structure would be an 84-inch reinforced concrete pipe. The damaged drainage structure would be completely removed (along with present outlet steel frame support) or, end pipe sections removed and capped shut with concrete and levee embankment backfilled with impervious materials. In addition, all stone products utilized during Sponsor conducted flood fight activities would be salvaged and placed along the riverside levee toe line or outlet drainage ditch. This alternative would require 9,277 cubic yards of fill. In addition, the recommended plan would involve seeding the damaged sod covers at various locations along the levee (riverside at station 222+34 to 555+00; riverside at station 52+44 to 190+83; and landside at station 63+85 to 190+83).

Borrow Areas: Approximately 75% of the required borrow would be obtained by degrading of the existing levee embankment riverward of the new landward shift. The remaining borrow (approximately 0.9 acres) would be obtained from excavation of a landside drainage ditch. Should additional borrow be required, it would be obtained from alongside an existing post-1993 riverward scour feature. All designated borrow locations are positioned within previously "environmentally cleared" borrow locations assessed during the 1993 repair actions.

Alternative 1: (In-place Repair): This repair action would consist of removal of the damaged pipes and replacement of piping within its current location and seeding of damaged slopes. In addition, all stone products utilized during Sponsor conducted flood fight operations would be salvaged and placed along the riverside levee toe line.

No-Action Alternative- Under the no-action alternative, the USACE would not repair the damage to the levee caused by the May 2007 flood event.

The total land area disturbed by all repair actions (including borrow locations), is approximately two acres or less. New landward levee shift will be seeded and mulched upon completion.

Section 8: NATIONAL ENVIRONMENTAL POLICY ACT REVIEW

As part of the NEPA review for the proposed project, CENWK circulated a Notice of Availability (Notice) of the Environmental Assessment (EA) and Draft Finding of No Significant Impact (FONSI), dated _____, 2008, with a thirty-day comment period ending on _____, 2008 to the public and resource agencies. The Notice was e-mailed to individuals/agencies/businesses listed on CENWK-Regulatory Branch's e-mail mailing list. The Notice informed these individuals that the EA and Draft FONSI were available on the CENWK webpage or that they could request the EA and Draft FONSI in writing, in order to provide comment. The following comments were received and evaluated from coordination of the Notice:

(Section pending comments)

Section 9: AFFECTED ENVIRONMENT:

The project area is located in the counties of Ray and Lafayette, Missouri. Landward of the levees, the areas are mainly comprised of agricultural lands and grassed fields. A small drainage ditch is located west and landward of the Henrietta-Crooked River levee system. The drainage ditch is bordered by grasses. The Hardin Conservation Area is located just east and northeast of the project areas, and immediately east the Crooked River. Wooded riparian areas border both banks of the Crooked River and are found riverward of the Ray-Lafayette levee along the Missouri River. Common trees found within these areas include willows, cottonwoods and sycamores. In addition, various wildlife species occupy these areas including small fur-bearing species, white tail deer, reptiles, amphibians, and various birds, including neo-tropical migrants.

Primary resources of concern identified during the evaluation included: water quality, fish and wildlife, threatened and endangered species, riparian woodlands, wetlands, archeological and historical resources, floodplain, and economics. Projects impacts to other resources were determined to be no effect.

Section 10: ENVIRONMENTAL CONSEQUENCES:

Water quality

The recommended plan, Alternative 1, would result in minor, temporary, construction related adverse impacts to water quality resulting from site runoff and increased turbidity. The minor impacts associated with the recommended plan would be avoided and/or minimized to the greatest extent possible by the implementation of Best Management Practices and measures required under the National Pollutant Discharge Elimination System (NPDES) permit. Best management practices would minimize the incidental fallback of material into the drainage ditch or the Henrietta-Crooked River during construction and would minimize the introduction of fuel, petroleum products, or other deleterious material from entering into the waterway. Such measures would consist of erosion control fences; storing equipment, solid waste, and petroleum products above the ordinary high water mark and away from areas prone to runoff; and requiring that all equipment be clean and free of leaks. To prevent fill from reaching water sources by wind or runoff, fill would be covered, stabilized or mulched, and silt fences would be used as required. A NPDES permit has been obtained for construction of the project and all appropriate measures will be taken to minimize erosion and storm water discharges during and after construction.

Under the Alternative 1 (In-place repair), repairs resulting from implementation of this alternative plan would result in minor, temporary, construction related adverse impacts to water quality similar to those describe above. As with the Recommended Plan, these impacts would be avoided and/or minimized to the greatest extent possible by the implementation of Best Management Practices and measures required under the National Pollutant Discharge Elimination System permit.

The "No-Action" Alternative would result in adverse impacts to water quality from increased levels of nutrient loading and wastes, including runoff of pollutants from industrial sources, petroleum products, and non-point sources of human and animal wastes.

Fish and Wildlife

The recommended plan would result in minor, temporary, construction related impacts to fish and wildlife resources. The impacts to wildlife resources would be related to noise and visual disturbance during the construction activity. The impacts to fishery resources would be related to possible site runoff and increased turbidity, which would be minimized through the use of best management practices. However, the expansion of riverward scour area during borrow fill acquisition would provide increased wetland habitat for fish and wildlife

Under the Alternative 1 (In-place repair), impacts would be similar to those described under the recommended plan.

The "No Action" Alternative would have minimal effects on fish and wildlife resources. These impacts would arise from flooding within the now unprotected area. Aquatic species may

benefit as more frequent flooding could occur in the now unprotected areas. Other terrestrial organisms could be temporarily displaced or have their habitat degraded by flooding.

Threatened and Endangered Species

The federally listed threatened or endangered species within Ray and Lafayette Counties, Missouri include the Indiana bat (*Myotis sodalis*) (E) and the pallid sturgeon (*Scaphirhynchus albus*) (E). The Bald eagle is no longer federally listed, but is still protected under the Bald and Golden Eagle Act and Migratory Bird Treaty Act.

The USACE has determined that no adverse effects on any federally-listed threatened or endangered species or their habitat would occur with the proposed levee repair work. The Pallid sturgeon (Scaphirhynchus albus) is found primarily in the Missouri River and Mississippi River. No work is proposed within the Missouri River. The Indiana bat (Myotis sodalis) roosts in exfoliating trees greater than 9 inches diameter breast height (dbh) during the spring and summer, and hibernate in caves during the fall and winter. Levee work would not impact any Indiana bat habitat. No impacts to any state listed endangered species or their habitat were identified.

Under the No-Action Alternative, there would be no impacts to endangered or threatened species since the project area does not contain habitat to support these listed species.

Riparian Woodlands

With the implementation of the recommended plan, no mast-producing trees or impacts to any large trees (> 9 inches dbh) would occur. A few shrub scrub willows and cottonwood trees are scattered along the drainage ditch that may be removed during borrow fill operations, however, natural plant succession should provide adequate re-vegetation of impacted area. In addition, the recommended plan would restore the grassed-levee slopes that existed prior to the declared flood event of 2007.

Under the Alternative 1 (In-place repair), repairs resulting from implementation of this alternative plan would have no impact on woodlands.

The "No Action" Alternative could result in increases to the floodplain and to floodplain vegetation if lands are abandoned from farming due to the high risk of flooding. Over time, successional vegetative growth could result in increased floodplain vegetation.

Wetlands

The recommended plan could have a minor, beneficial impact on an adjacent wetland to Crooked River. Minor, short term beneficial impacts would occur from the possible acquisition of borrow material be from a cleared area within and along the existing riverward scour hole adjacent to Crooked River and from the expansion of the drainage ditch. The General Permit Number NWKGP-41 authorizes these actions (Appendix II). Beneficial impacts to the aquatic system

would occur from the expansion of riverward scour area and drainage ditch during borrow fill acquisition, which would provide increased aquatic habitat for fish and wildlife.

Under the Alternative 1 (In-place repair), repairs resulting from implementation of this alternative plan would have no impact on wetlands.

The "No Action" Alternative could result in minor benefits to existing wetlands located on the flood plain within the protected area as these areas would be subject to a high level risk of future flooding.

Archeological and Historical Resources

A cultural resources review of the proposed levee repairs in Ray County, Missouri was conducted by the Kansas City District archeologist. No sites listed on or eligible for listing on the National Register of Historic Places are located within or near the proposed project area. The recommended plan would have no impact to sites listed on or eligible for inclusion on the National Register of Historic Places (NRHP). In a letter to the Missouri State Historic Preservation Officer, (SHPO), the COE recommended that the project would have no effect on historic properties and that the project should be allowed to proceed. The SHPO concurred with this recommendation on November 14, 2007 (Appendix II). Further, this project would be coordinated with appropriate federally recognized Native American tribes.

If in the unlikely event that archeological material is discovered during project construction, work in the area of discovery would cease until the discovery is investigated by a qualified archeologist, and the find is coordinated with SHPO and the Tribes.

The "No Action" Alternative would result in no effects to archaeological or historical resources.

Agricultural Land

With the implementation of the recommended plan, restoring the levees to their pre-flood levels of protection would protect 26,100 acres of existing cropland from a 10-yr flood event. A long-term, minor impact to agricultural production is the removal of approximately less than one acre of crop land from active agricultural activity. The acre of agricultural land would be returned to the floodplain due to the slight landward levee setback associated with the relocation of the drainage structure.

Under the Alternative 1 (In-place repair), repairs resulting from implementation of this alternative plan would have no impact on agricultural activity or loss of agricultural lands.

The "No Action" Alternative would adversely impact agricultural activity by exposing approximately 27,127 acres of agricultural lands (26,100 acres of croplands) to increased flooding. This loss of agricultural production would have related impacts such as lost income, lower tax base, and decreased land value.

Floodplain

The recommended plan would restore a 10-yr level of flood protection to the existing levee system. The proposed action would result in a slight increase in the floodplain with the levee setback, but would not directly or indirectly support more development in the floodplain or encourage additional occupancy and/or modification of the base floodplain. Furthermore, the Corps has determined that the recommended plan complies with the intent of Executive Order 11988.

Under the Alternative 1 (In-place repair), repairs resulting from implementation of this alternative plan would result in similar protections as described above for the recommended plan.

The "No Action" Alternative would continue to expose all public and private infrastructure protected by the levee prior to the flood damage to a high level risk of future flooding.

Economics

With the implementation of the recommended plan, the levees would be restored to a 10-year level of flood protection. Public and private infrastructure protected by the levee prior to the flood damage would continue to be protected against a 10-year flood event. Economic conditions are unlikely to change from those of pre-damage levee conditions with the repair of this levee system.

Under the Alternative 1 (In-place repair), repairs resulting from implementation of this alternative plan would result in similar protections as described above for the recommended plan. However, this alternative is less cost effective than the recommended plan.

The "No Action" Alternative has a zero benefit to cost ratio and would continue to expose all public and private infrastructure protected by the levee prior to the flood damage to a high level risk of future flooding. The area would continue to suffer the effects of a levee with a smaller level of protection and would be exposed to annual damages in millions of dollars.

Section 11: CUMULATIVE IMPACTS

The combined incremental effects of human activity are referred to as cumulative impacts (40 CFR 1508.7). While these incremental effects may be insignificant on their own, accumulated over time and from various sources, they can result in serious degradation to the environment. The cumulative impact analysis must consider past, present, and reasonably foreseeable actions in the study area. The analysis must also include consideration of actions outside of the Corps, to include other State and Federal agencies. As required by NEPA, the Corps has prepared the following assessment of cumulative impacts related to the alternatives being considered in this EA.

Historically, the Missouri River and its floodplain has been altered by past actions such as bank stabilization, dams on the river and its tributaries, roads/bridges, agricultural and urban levees, channelization, farming, water withdrawal for human and agricultural use, urbanization and other

human uses. These activities have substantially altered the terrestrial and aquatic ecosystem within the Missouri River watershed.

The USACE, which administers Section 10 of the Rivers and Harbors Act of 1899 and Section 404 of the Clean Water Act, has issued and will continue to evaluate permits authorizing the placement of fill material in the Waters of the United States and/or work on, in, over or under a navigable water of the United States including the Missouri River and its tributaries.

The Corps, which administers Section 10 of the Rivers and Harbors Act of 1899 and Section 404 of the Clean Water Act, has issued and will continue to evaluate permits authorizing the placement of fill material in the Waters of the United States and/or work on, in, over or under a navigable water of the United States including the Missouri River and its tributaries. These projects typically result in minor impacts to the aquatic ecosystem. The Corps, under the authority of the Public Law 84-99 Levee Rehabilitation and Inspection Program, has and will continue to provide rehabilitation assistance to Federal and non-Federal levee sponsors along the Missouri River which participate in the Public Law 84-99 Program. These projects typically result in minor short term construction related impacts to fish and wildlife and the habitats upon which they depend. Resources typically affected by this type of project generally include, but are not limited to, wetlands, flood plain values, water quality, and fish and wildlife habitat.

The proposed action would involve restoring the grassed slopes and repairing a drainage structure that was damaged during the May 2007 flood. The proposed levee repair action would result in short-term, minor impacts to wildlife resources from noise generated construction activities. However, these minor construction-related impacts would be greatly offset by restoring the flood risk management capability and its associated social and economic benefits of the existing levee system. The proposed action would not result in any additional adverse impacts to environmental resources that were affected from the aforementioned past actions. Thus, no significant cumulative impacts associated with the proposed rehabilitation of the existing levee system have been identified.

Section 12: MITIGATION MEASURES

The recommended plan would result in the expansion of an existing scour hole 'wetland area' located adjacent to Crooked River from the excavation of fill material. The borrow operations would create an additional shallow water habitat adjacent to the existing riverward scour features and increased floodplain.

The identification of borrow sites was completed in accordance with the Standard Operating Procedures for the Selection of Borrow Sites Missouri River and Tributaries 1995 Levee Repair. These guidelines were developed through coordination with the U.S. Fish and Wildlife Service (USFWS) and the Missouri Department of Conservation (MDC) to avoid and/or minimize adverse impacts to the aquatic ecosystem to the greatest extent practicable, and where possible, take advantage of the borrow acquisition activity to enhance the aquatic ecosystem. Clearing of early successional woody vegetation and excavation which removes accumulated silt from existing wetlands and scours are considered beneficial and will enhance the overall function and value of the aquatic ecosystem. The USACE has determined in coordination with MDC and the

USFWS that natural plant succession should provide adequate re-vegetation of non mast producing trees. Borrow activities which expands existing scour holes increases their function and value. As the proposed borrow activity within the previously used scour hole/wetland has been designed to enhance the functions and values of the aquatic ecosystem, no mitigation is proposed.

Section 13: COMPLIANCE WITH ENVIRONMENTAL QUALITY STATUTES

The Compliance with Designated Environmental Quality Statutes that have not been specifically addressed earlier in this report is covered in the following table:

Table 1
Compliance of Preferred Alternative with Environmental Protection Statutes and Other Environmental Requirements

Federal Polices	Compliance
Archeological Resources Protection Act, 16 U.S.C. 470, et seq.	Full Compliance
Clean Air Act, as amended, 42 U.S. C. 7401-7671g, et seq.	Full Compliance
Clean Water Act (Federal Water Pollution Control Act), 33 U.S.C. 1251, et seq.	Full Compliance
Coastal Zone Management Act, 16 U.S.C. 1451, et seq.	Not Applicable
Endangered Species Act, 16 U.S.C. 1531, et seq.	Full Compliance
Estuary Protection Act, 16 U.S.C. 1221, et seq.	Not Applicable
Federal Water Project Recreation Act, 16 U.S.C. 4601-12, et seq.	Full Compliance
Fish and Wildlife Coordination Act, 16 U.S.C. 661, et seq.	Full Compliance
Land and Water Conservation Fund Act, 16 U.S.C. 4601-4, et seq.	Not Applicable
Marine Protection Research and Sanctuary Act, 33 U.S.C. 1401, et seq.	Not Applicable
National Environmental Policy Act, 42 U.S.C. 4321, et seq.	Full Compliance
National Historic Preservation Act of 1966, as amended, 16 U.S.C. 470a, et seq.	Full Compliance
Rivers and Harbors Act, 33 U.S.C. 403, et seq.	Full Compliance
Watershed Protection and Flood Prevention Act, 16 U.S.C. 1001, et seq.	Full Compliance
Wild and Scenic River Act, 16 U.S.C. 1271, et seq.	Not Applicable
Farmland Protection Policy Act, 7 U.S.C. 4201, et. seq.	Full Compliance
Protection & Enhancement of the Cultural Environment (Executive Order 11593)	Full Compliance
Floodplain Management (Executive Order 11988)	Full Compliance

Protection of Wetlands (Executive Order 11990)	Full Compliance
Environmental Justice (Executive Order 12898)	Full Compliance

NOTES:

a. Full compliance. Having met all requirements of the statute for the current stage of planning (either preauthorization or postauthorization).
b. Partial compliance. Not having met some of the requirements that normally are met in the current stage of planning.
c. Noncompliance. Violation of a requirement of the statute.
d. Not applicable. No requirements for the statute required; compliance for the current stage of planning.

Clean Water Act, Section 404 and 401
The recommended plan would involve excavation of riverward scour area and drainage ditch, which is an action covered under the General Permit No. 41 (Appendix II).

Clean Water Act, Section 402
A NPDES permit has been received from Missouri Department of Natural Resources and is located in Appendix II.

Endangered Species Act, Section 7
The Corps of Engineers has made a determination that no impacts to any federally listed threatened or endangered species or their habitat would occur with the project action. Coordination of ESA would be completed upon review of this EA and concurrence of this determination with the USFWS.

National Historic Preservation Act
No sites listed on or eligible for listing on the National Register of Historic Places are located within or near the proposed project area. The Missouri State Historic Preservation Office (SHPO) concurred with this recommendation on November 14, 2007 (Appendix II).

Section 14: CONCLUSION

The flood risk management level achieved by the recommended plan would be the same as the original pre-flood levees. The proposed action would involve restoring agricultural levees damaged during the May 2007 flood to their pre- protection levels. This project would result in short-term, minor construction related adverse impacts to water quality resulting from site runoff and increased turbidity. In addition, a few small trees and shrubs along the drainage ditch may be removed during borrow fill operations; however, natural plant succession should provide adequate re-vegetation of impacted area. Beneficial impacts to the aquatic system would occur from the expansion of riverward scour area during borrow fill acquisition, which would provide increased wetland habitat for fish and wildlife. The proposed action would have no impact to sites listed on or eligible for inclusion on the National Register of Historic Places or threatened and endangered species. Overall, the minor, impacts associated with this project are outweighed by the long-term social and economic benefits.

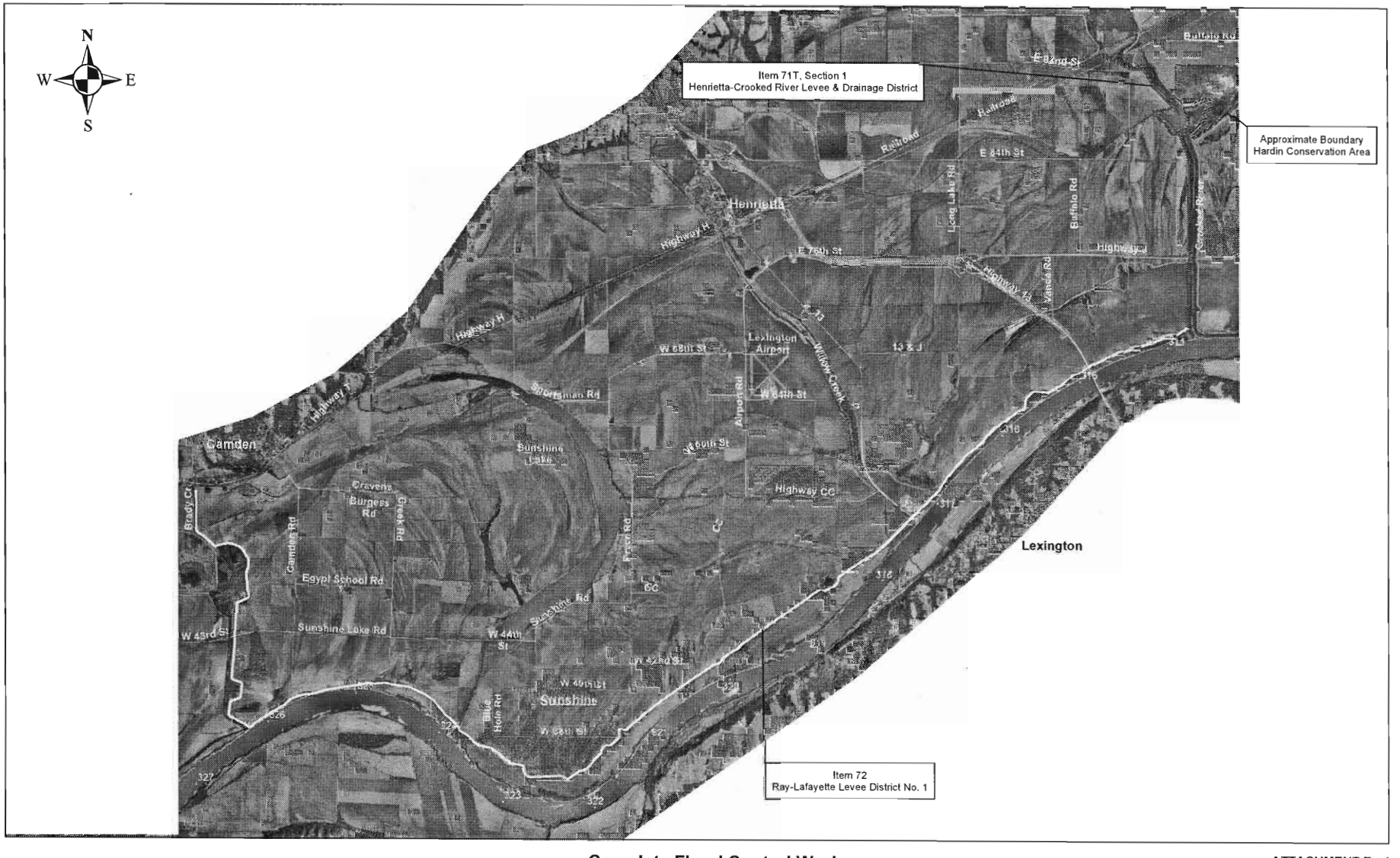
Section 15: PREPARERS

This EA and the associated draft FONSI was prepared by Ms. Lekesha Reynolds (Environmental Resource Specialist), with relevant sections prepared by Mr. Timothy Meade (Cultural Resources). The address of the preparers is: U.S. Army Corps of Engineers, Kansas City, District; PM-PR, Room 843, 601 E. 12th St, Kansas City, MO 64106.

APPENDIX I – PROJECT DRAWINGS

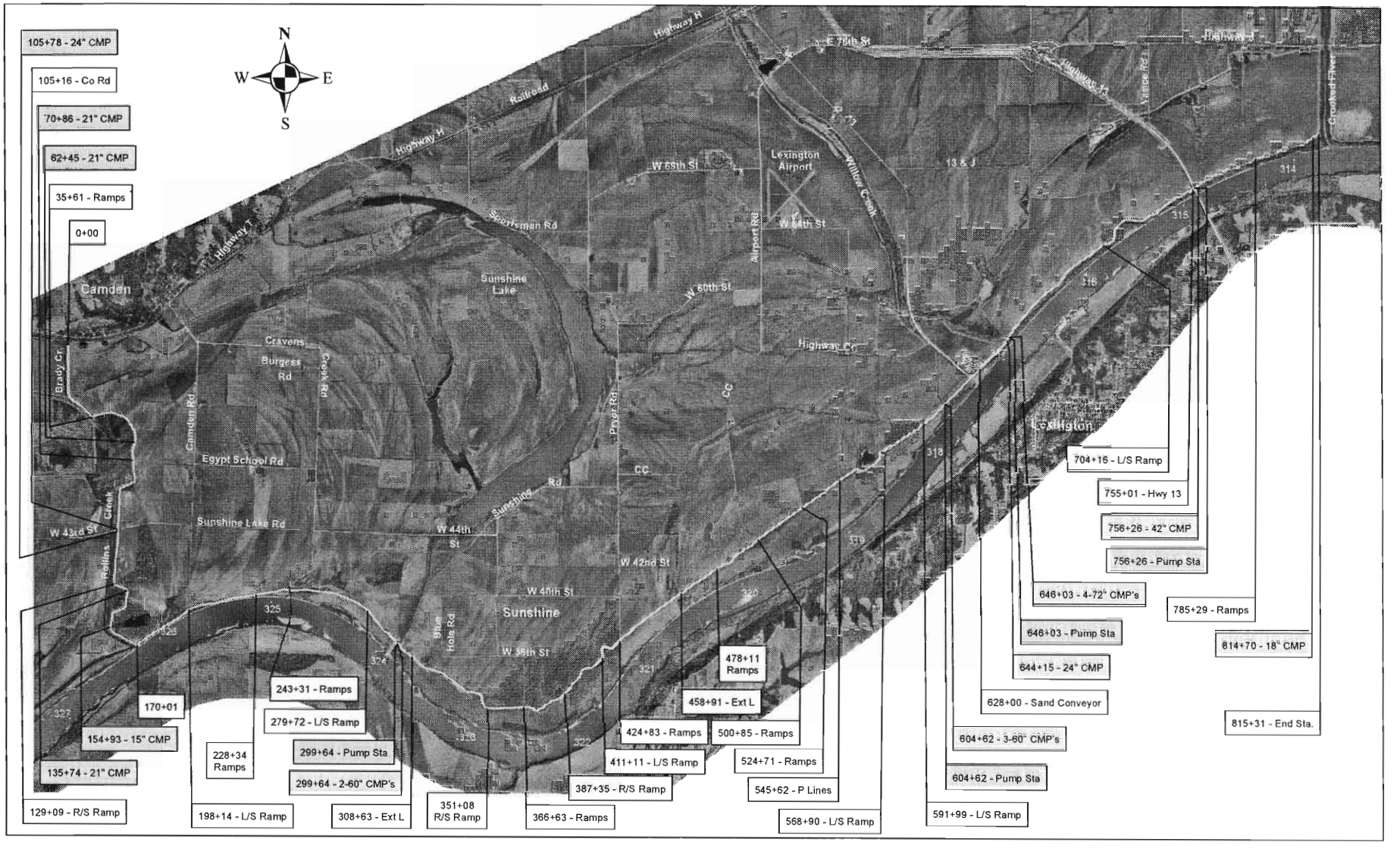
HENRIETTA-CROOKED RIVER LEVEE 7 DRAINAGE DISTRICT, SECTION 1 AND RAY-LAFAYETTE LEVEE DISTRICT NO. 1, NON-FEDERAL, EMERGENCY LEVEE REHABILITATION PROJECT

May 2008



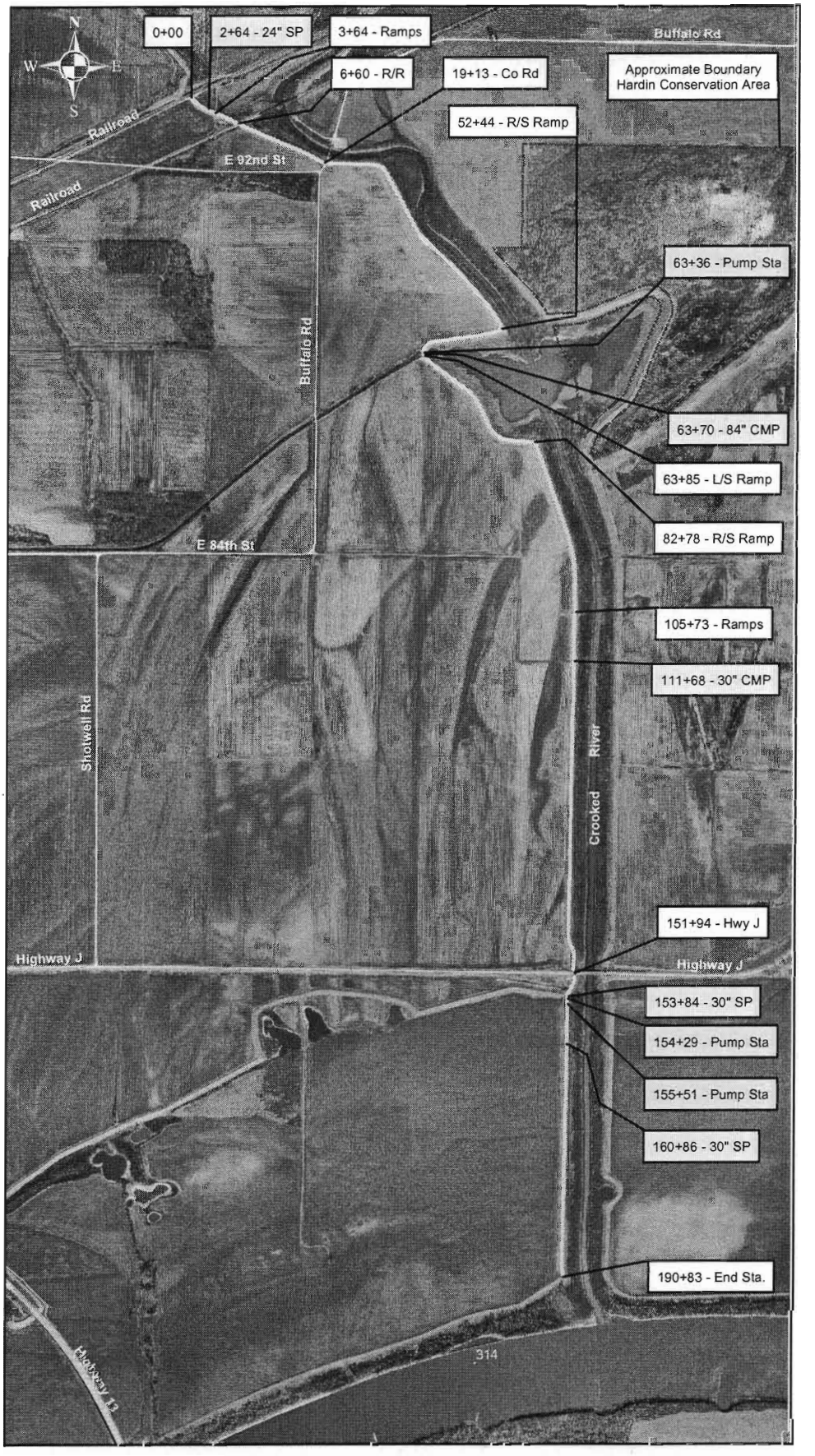
Complete Flood Control Work
Item 72 & 71T Section 1

ATTACHMENT B - 1



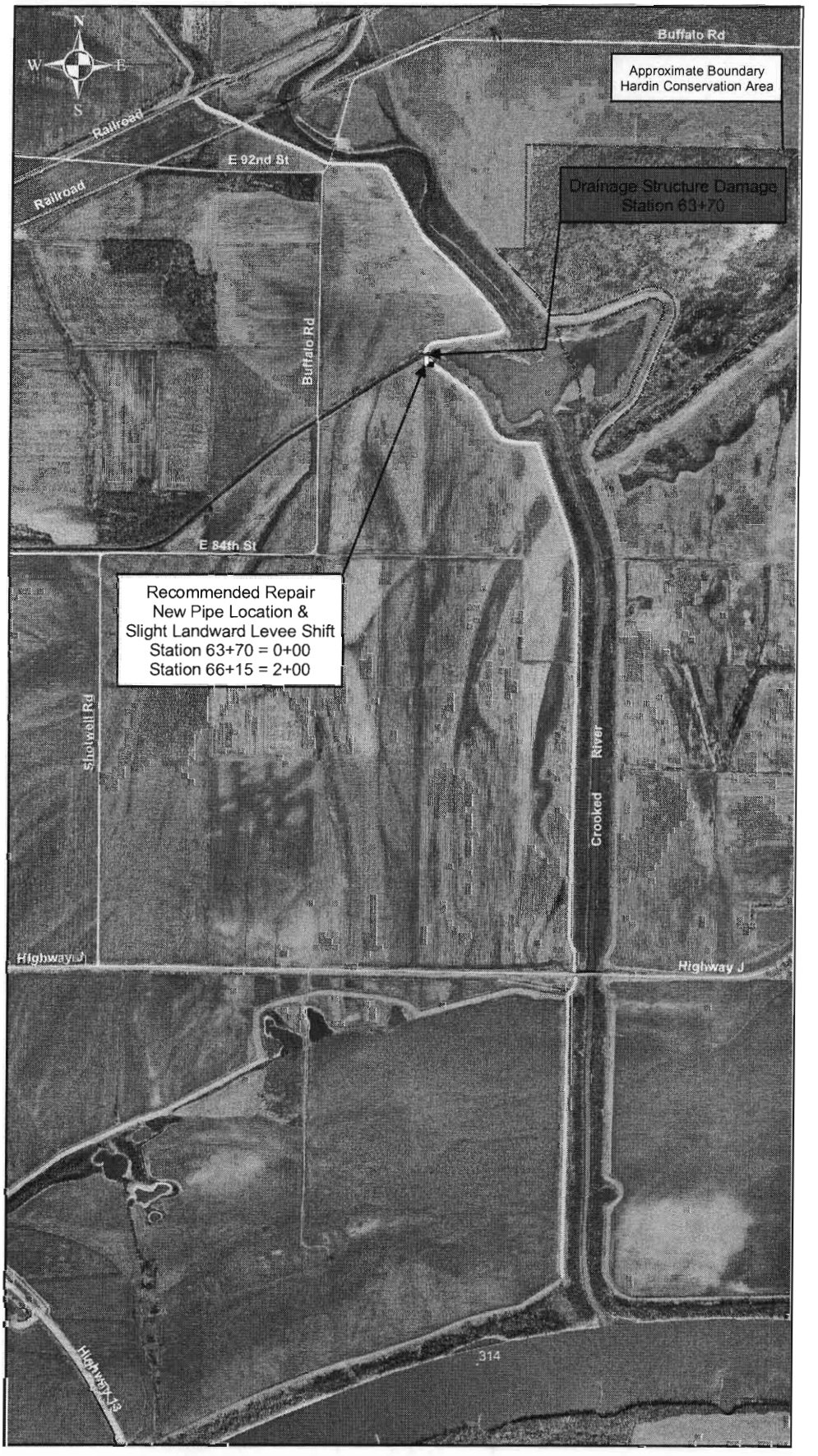
Item 72
Ray-Lafayette Levee District No. 1

ATTACHMENT B - 2



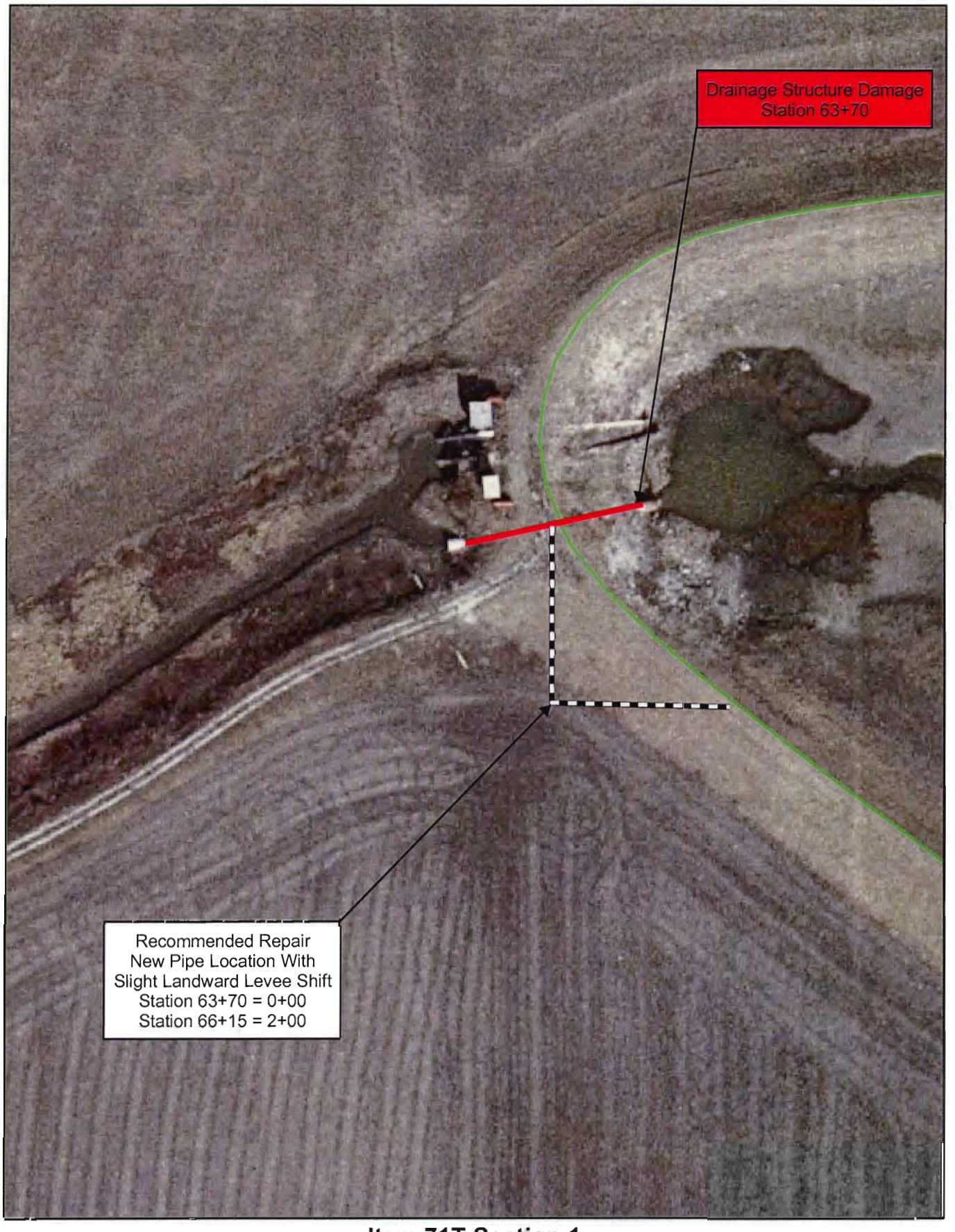
Item 71T Section 1 **ATTACHMENT B - 3**

Henrietta-Crooked River Levee & Drainage District



Item 71T Section 1 **ATTACHMENT D - 1**

Henrietta-Crooked River Levee & Drainage District



Item 71T Section 1

Henrietta-Crooked River Levee & Drainage District

ATTACHMENT D - 2

Henrietta-Crooked River Levee & Drainage District - Section 1

Borrow Map

DESCRIPTION

Standing at approximate station 400+00 looking upstream at lost (destroyed) sod cover on the riverside levee slope.

DESCRIPTION

Standing at approximate station 545+00 looking upstream at lost (destroyed) sod cover on the riverside levee slope.

Henrietta-Crooked River Levee & Drainage District – Section 1

DESCRIPTION

Looking at damage to 84" cmp drainage structure at station 63+70.

DESCRIPTION

Standing at approximate station 63+00 looking downstream at flood fight efforts (placed riprap & waste lime), conducted by Sponsor during flood event.

DESCRIPTION

Standing at approximate station 74+00 looking upstream at lost (destroyed) sod cover on riverside levee slope.

DESCRIPTION

Standing at approximate station 74+00 looking upstream at lost (destroyed) sod cover on landside levee slope

Henrietta-Crooked River Levee & Drainage District – Section 1

Date: 11/7/07

Standing at levee station 63+85 looking west (landward) at landside drainage ditch excavation borrow area (widen existing ditch).

Date: 11/15/07

Standing at levee station 63+85 looking east (riverward) at riverside borrow area.

APPENDIX II- NEPA REVIEW

HENRIETTA-CROOKED RIVER LEVEE
7 DRAINAGE DISTRICT, SECTION 1
AND RAY-LAFAYETTE LEVEE DISTRICT NO. 1,
NON-FEDERAL, EMERGENCY LEVEE
REHABILITATION PROJECT
May 2008

CULTURAL RESOURCE ASSESSMENT
Section 106 Review

CONTACT PERSON/ADDRESS

Timothy Meade, District Archeologist
Corps of Engineers, Kansas City District
700 Federal Building
Kansas City, Missouri 64106-2896

C:

Joe Cothern, EPA

PROJECT:

Emergency Repairs, Henrietta-Crooked River Levee

FEDERAL AGENCY

COE

COUNTY:

RAY

The State Historic Preservation Office has reviewed the information submitted on the above referenced project. Based on this review, we have made the following determination:

☐ After review of initial submission, the project area has a low potential for the occurrence of cultural resources. A cultural resource survey, therefore, is not warranted.

☒ Adequate documentation has been provided (36 CFR Section 800.11). There will be "no historic properties affected" by the current project.

☐ An adequate cultural resource survey of the project area has been previously conducted. It has been determined that for the proposed undertaking there will be "no historic properties affected".

For the above checked reason, the State Historic Preservation Office has no objection to the initiation of project activities. PLEASE BE ADVISED THAT, IF THE CURRENT PROJECT AREA OR SCOPE OF WORK ARE CHANGED, A BORROW AREA IS INCLUDED IN THE PROJECT, OR CULTURAL MATERIALS ARE ENCOUNTERED DURING CONSTRUCTION, APPROPRIATE INFORMATION MUST BE PROVIDED TO THIS OFFICE FOR FURTHER REVIEW AND COMMENT. Please retain this documentation as evidence of compliance with Section 106 of the National Historic Preservation Act, as amended.

By: Mark A. Miles — **November 14, 2007**

Mark A. Miles, Deputy State Historic Preservation Officer — **Date**

MISSOURI DEPARTMENT OF NATURAL RESOURCES
STATE HISTORIC PRESERVATION OFFICE
P.O. Box 176, Jefferson City, Missouri 65102
For additional information, please contact Judith Deel, (573) 751-7862. Please be sure to refer to the project number: 004-RY-08

Standard Operating Procedures for the Selection of Borrow Sites Missouri River and Tributaries 1995 Levee Repair

1. Borrow Area Determination. It is the responsibility of the Corps of Engineers (Corps) to design and implement Public Law 84-99 levee repair projects that protect jurisdictional wetlands, Federally listed threatened and endangered species and their habitats (i.e., bald eagle, Indiana bat, and pallid sturgeon), and other important riverine and floodplain habitats. It is also the Corps' responsibility to complete levee repairs in a timely and economical fashion without placing undue hardship on landowners and local levee districts.

These Standard Operating Procedures (SOP) are not intended to be absolute. This document should be viewed as a flexible guideline which field personnel and borrow negotiators may apply to meet landowners, levee districts, and environmental concerns and objectives.

a. **Riverward borrow areas** in open prior converted croplands or farmed wetlands (within 1,000 feet of a levee break) and old borrow areas and scour holes that are filled with sediment are preferred borrow locations. Tree clearing will generally be avoided; however, riverward areas with woody vegetative cover of less than 9 inches diameter at breast height (dbh) may be used if prior converted croplands, farmed wetlands, or old borrow areas and scour holes are not available. Selective clearing in these wooded areas may be accomplished to maintain or enhance riparian habitat. At least an 80-100 foot wide band of timber should be maintained between the levee and the river bank. Riverward areas with stands of timber that died as a result of the 1993 flood event may be used as borrow sources. In these borrow areas, if possible, some large potential cavity nesting or den trees should be preserved on the edge of the borrow site, especially in localities adjacent to live forested areas. Wooded areas may be classified as wetlands and environmental regulations may apply (see Paragraph 8 - **Wetlands Protection**). Use of mature or dense timbered areas as borrow sites may be cost prohibitive because of the additional expense incurred to clear and grub the timber, the large amount of borrow material that would be unusable because of the undesirable woody material (roots, stumps, etc.) contained in the borrow, and the larger borrow area needed to obtain the required amount of usable material.

Riverward borrow will be used to lessen disruption to flood-protected agricultural lands; however, the levee district should be informed that use of riverward borrow may delay levee repairs because the riverward borrow areas are often wet and difficult to access. To avoid delays in awarding construction contracts, alternate landward borrow areas should also

be identified and made available for use if the riverward borrow areas are too wet immediately and prior to construction.

b. **Landward borrow areas** in open agricultural fields will be used as an alternative to suitable riverward areas. Landowners should be informed that the planting or presence of crops will not eliminate an area from consideration as a potential borrow site. The removal of any vegetation on the landward side to repair the levee will be subject to the same guidelines as previously outlined.

Borrow will not be taken from within 30 feet of the levee toe unless taken to repair minor sidewash damage. Borrow will not be taken from within 30 feet of the high bank of the river. The cut slopes of borrow areas in landward prior converted croplands will not be steeper than 1 vertical (V) to 3 horizontal (H) measurement unit. **Riverward borrow areas** should generally have steeper side slopes and be excavated to the maximum depth practical to reduce the area of disturbance and to maximize the potential for creating aquatic habitat (see Paragraph 8 - **Wetlands Protection**).

c. **In unusual cases,** levee repairs may not be feasible without the removal of trees larger than 9 inches dbh. In these situations, the borrow areas will be delineated by Corps regulatory personnel or field biologists to lessen adverse impacts and reduce the number of trees removed. Decisions concerning proposed levee repairs or borrow areas affecting one-half acre or more of timber averaging in excess of 9 inches dbh will be made in consultation with the U.S. Fish and Wildlife Service (FWS) and the Missouri Department of Conservation (MDC). The following actions will be considered during borrow negotiations to lessen impacts.

1. **Levees repaired along the original alignment.** Borrow sites in wooded areas will be small in size and scattered randomly. The size of the borrow area should remain small in relation to the size of the existing timber stand (approximately 20 percent). The depth of the borrow pit should be as deep as possible to minimize timber clearing. Where the existing riparian timber resources are narrow, borrow areas would be a minimum of 200 to 300 feet apart. A minimum band of timber 80-100 feet wide from the high bank should be maintained. Every effort will be made to avoid any dominant trees, large cavity nesting or den trees, or trees greater than 9 inches dbh. In most cases, destroyed timber mitigation will be through natural succession of borrow areas or through non-forested buffer areas around scour features or setbacks. However, if mast-producing trees are removed, replacement plantings will be considered.

2. **Levees repaired with landward realignments.** Where scour features were created by the flood event and the proposed remedy is a landward realignment,

landowners should be encouraged to maintain the scour feature. If the scour feature created or expanded is considered a water of the U.S., landowners will be informed that filling of the scour feature (in most cases holes) would be an adverse action and a Clean Water Act regulatory violation. However, the natural filling of the scour feature when caused by river sedimentation would not be considered a regulatory violation. Borrow material may be taken from the scour feature to create shallow water habitat. A 100 foot (average) buffer strip will be maintained between the scour feature and the reconstructed levee. Riverward borrow areas will be hydraulically connected to the scour feature if located in the immediate vicinity of the scour feature but not necessarily connected to the river.

d. **The preferred borrow area for repair of minor topwash and sidewash** will be agricultural fields adjacent to the levee where the damage has occurred. Borrow for severe topwash and sidewash will be designated and negotiated in the same manner as outlined above.

2. **Borrow Negotiations.** The levee district has the responsibility to furnish the borrow areas and easements required for the levee repairs. If the Levee District chooses to use the Corps recommended borrow areas, the amount of time required to negotiate and repair the levee should be reduced. The borrow site identification and negotiation process will begin during the first on-site contact with the levee district representative(s). This contact should be made prior to the borrow area assessment conducted by a Corps field biologist or borrow negotiator. An on-site meeting will take place to provide the landowners with a set of written criteria that will be used for identifying borrow (see attached **BORROW SITE SELECTION CRITERIA**). All landowners where damage occurred will be requested to be present. **The criteria will be discussed and the landowners will be requested to delineate, on a map, the borrow areas they prefer.** When the damage survey and field assessments are complete, a second meeting will take place with the levee district representative(s) to discuss proposed borrow areas. Again, it will be the responsibility of the levee districts' to obtain borrow area easements from landowners. The landowners that sign borrow easements will be informed by letter of any mitigation requirements (e.g., not filling scour features or borrow sites, maintaining designated buffers around borrow areas). After borrow negotiations are completed, a detailed map will be prepared defining specific borrow areas based upon the volume of material required for repairs and the criteria contained in this SOP.

3. **Damage Surveys.** Survey crews will follow a standard reporting procedure to provide data on the location of reported damage. The survey data will provide an estimate of the damage, stationing, yardage, and alternate methods of repair. Survey crews will not be responsible for any negotiations on borrow sources with the sponsor. **Landowners will undoubtedly ask survey crews questions about the source of borrow, but they should be told to contact their levee district point-of-contact representative.**

4. Cultural Surveys. The 1993 Midwest flood event Programmatic Agreement for cultural resources compliance for Public Law 84-99 projects is still in effect and will be followed for repair of projects damaged by the 1995 flood event. Many areas were surveyed for cultural resources and cleared with the Missouri State Historic Preservation Officer (SHPO) during the 1993 flood event levee repair effort. Maps/cultural resource assessments prepared for 1993 levee repairs will be utilized to the greatest extent possible.

Cultural resources field work/surveys will not be required in proposed construction work areas or borrow sites if no known sites are present and any of the following apply: (1) excavation depth in agricultural fields is not greater than 8 inches; (2) the subject sites were cleared for cultural resources for the 1993 flood event repair work; (3) subject sites are located within the boundaries of old river channels as shown on Corps' maps of the historic Missouri River channel; or, (4) borrow and/or construction activity remains 150 feet away from any visible structure or building remains.

Cultural resources surveys will be required if there is a potential for cultural resources, such as, but not limited to, areas where the above conditions do not apply, where construction or borrow activities are adjacent to or on the bluff, if there is a known archeological site nearby, or the area was not surveyed in 1993.

However, coordination with the SHPO will be conducted for every levee, as required by the Programmatic Agreement. In those instances where cultural field work is required, the ground surface must be visible, i.e., not inundated, before the area may be surveyed for cultural resources materials.

5. Field Survey. Potential borrow areas (both landward and riverward) within 1,000 feet of levee damage and scour features, and any landowner-identified "preferred" borrow areas outside this band, will be evaluated and mapped during the initial site visit. Significant environmental and cultural resources features, including mature trees, wooded wetlands, farmed wetlands, and potential cultural resource sites, will be accurately outlined and labeled on the map.

6. Fish and Wildlife Agency Coordination. This SOP was coordinated with the FWS and the MDC prior to any borrow designation or negotiation. The FWS and MDC have been provided with a list of levees to be repaired and a set of floodplain maps with highlighted levees. Further coordination will take place on a case-by-case basis if mitigation for the loss of mast-producing trees is warranted or when proposed actions would impact one-half acre or more of trees averaging greater than 9 inches dbh. The agencies will be contacted to discuss appropriate mitigation and/or a proposed mitigation action. The FWS and the MDC will also

be invited to assist and advise the Corps in periodic management and field reviews of the application of this SOP.

7. Toxic and/or Hazardous Substances. The Environmental Protection Agency (EPA) provided a database list of known releases, storage, and/or disposal of toxic and/or hazardous substances (Toxic Release Inventory, National Priorities, etc.) within the State of Missouri. In the application for assistance or the initial site visit, the levee district representative (usually the president) will be asked to provide a list (with addresses) of known businesses, factories, feedlots, etc., where spills may have occurred. This information will be used, along with field surveys, to verify the presence of hazardous substances. The presence of toxic and/or hazardous substances will eliminate a site from borrow consideration.

8. Wetlands Protection. Most wetland borrow areas will be located in prior converted croplands, farmed wetlands, and adjacent to riparian habitat. Naturally vegetated wetlands will be avoided. If naturally vegetated wetlands or riparian timber are impacted, appropriate mitigation will follow. The following is a list of conditions/stipulations that will be used for borrow activities in wetlands and in riparian habitat with wetland potential.

a. Farmed wetlands riverward of the levee should be dug as deep as possible, and, where applicable, connected to scour features, if present. The borrow areas should be configured so that one side has a slope of 1V:4H; the other slopes may be as steep as 1V:1.5H. Landward farmed wetlands can be dug to any depth and must have 1V:5H maximum side slopes. Farmed wetlands used for borrow should not be back filled.

b. Any uniform stand of timber that died as a result of the 1993 flood event may be used for borrow without mitigation for loss of riparian timber. However, riverward areas with stands of timber that died as a result of the 1993 flood event may be used as borrow sources. In these borrow areas, if possible, some large potential cavity nesting or den trees should be preserved on the edge of the borrow site in localities generally adjacent to live forested areas. Riverward borrow areas should be dug as deep as possible. Depths of 5 feet or more are preferred. The borrow areas should be constructed so that one side that has a slope of 1V:4H, the other slopes may be as steep as 1V:1.5H. The borrow areas should be allowed to revegetate naturally.

c. Riparian timbered areas with trees greater than 9 inches dbh may be used for borrow if cost effective and if old borrow areas, or wooded areas with trees less than 9 inches dbh, and riverward agricultural fields are not available. When riparian areas are used for borrow, regardless of timber size, they should be dug as deep as possible to minimize the amount of timber clearing. The borrow areas should be constructed so that one side that has a slope of 1V:4H, the other slopes may be as steep as 1V:1.5H. Borrow areas should be

allowed to revegetate through natural succession unless significant mast-producing trees are lost, then replacement plantings will be considered.

d. Levee repairs will be authorized under the 1995 Corps' General Permit (MRKGP-33M) which is currently under preparation (Permanent Protection and/or Repair of Flood Damaged Structures and/or Fills in the state of Missouri). The General Permit is expected to be finalized by early September 1995, i.e., before construction would begin on any levee repairs. Until finalized, any construction work involving waters of the U.S. must be authorized by individual permit. The 1995 General Permit will be in effect for 5 years.

e. Currently, agricultural land wetland delineations are the responsibility of the Natural Resources Conservation Service (NRCS). The Corps is responsible for wetland delineations on non-agricultural lands (e.g., areas that haven't been farmed in 5 years or more). When damage survey reports are complete, the NRCS will be sent aerial photographs with the locations of levee damage shown on them. The NRCS will delineate agricultural wetlands on the photographs. They will also identify any potential conflicts with land enrolled in the Conservation Reserve Program (CRP), Emergency Wetlands Reserve Program (EWRP), Wetlands Reserve Program (WRP), "minimal effects with mitigation", or other U.S. Department of Agriculture Programs. The marked-up photographs and U.S. Department of Agriculture Program information will be provided to the Corps. Final wetland delineations for all utilized agricultural and non-agricultural borrow sites will be drawn on aerial photographs and furnished to the NRCS.

f. Non-agricultural land wetland delineations will be performed by Corps regulatory personnel or field biologists. Off-site wetland screening will be performed using maps, photographs, and historical records to narrow the area of potential wetlands on non-agricultural lands. The findings of this off-site screening will be verified on-site prior to finalizing borrow negotiations. A short on-site observation report documenting the on-site delineations and a photo/map containing wetland delineations for both agricultural and non-agricultural land will be attached to the Environmental Assessment (EA) and Finding of No Significant Impact (FONSI) and/or placed in the official project files. Landowners will be informed by letter if borrow will be taken from a designated wetland and any potential Food Security Act or Swampbuster Program implications of using wetland borrow sites.

Attachment

28 August 1995
CEMRK-FO-MO

BORROW SITE SELECTION CRITERIA

The Corps of Engineers has prepared a list of factors to be used in the selection of borrow sites for levee repairs. Please consider these when recommending sites so that approval can be accomplished as quickly as possible.

- Borrow sites consisting of clay, sandy clay and silty loam are the most desirable.

- Riverward borrow areas located in open agricultural fields will be used when available.

- Tree clearing, especially involving mature trees, will be avoided. However, areas with small to medium size trees may be used for borrow if riverward agricultural fields are not available. Old borrow sites will also be considered for use. The borrow areas will be dug as deep as possible to minimize tree clearing.

- Riverward areas which are frequently wet should be avoided because the selection of these areas may result in construction delays. If wet areas are proposed as borrow sites, drier alternate areas should also be proposed. In most cases, special restrictions may apply if borrow areas have been delineated as wetlands.

- Agricultural lands which are selected for borrow should not be planted to crop, if the crop can not be harvested before construction begins. No compensation for crop damage due to levee repair construction activities will be paid by the Government.

- Borrow will not be taken within 30 feet of the levee toe unless the borrow is taken to repair minor sidewash and/or topwash.

- No borrow will be taken within 30 feet of the high bank of the river.

- Borrow sites should be located within 1,000 feet of the repair. Borrow for minor topwash and sidewash should be within 200 feet adjacent to the levee where the damage has occurred.

- Borrow and/or construction activity should remain 150 feet away from any visible structure or building remains.

- Cultural resource surveys will be required where there are known or potential archeological sites.

- Borrow sites with known or suspected to have hazardous substance contamination will not be considered for use.

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- Cultural resource surveys will be required where there are known or potential archeological sites.

- Borrow sites with known or suspected to have hazardous substance contamination will not be considered for use.

U.S. Army Corps of Engineers, KC District
MO-R100043, Various County

STATE OF MISSOURI

Matt Blunt, Governor • Doyle Childers, Director

DEPARTMENT OF NATURAL RESOURCES

www.dnr.mo.gov

NOV 30 2007

U.S. Army Corps of Engineers, KC District
700 Federal Building, 601 E. 12th Street
Kansas City, MO 64106

Dear Permittee:

Pursuant to the Federal Water Pollution Control Act, under the authority granted to the State of Missouri and in compliance with the Missouri Clean Water Law, we have issued and are enclosing a General State Operating Permit for U.S. Army Corps of Engineers, KC District.

Please review the requirements of your permit. Monitoring reports that may be required by this permit must be submitted on a periodic basis. Copies of the necessary report forms, if required, are enclosed and should be mailed to the regional office listed below. Please contact that office for additional forms.

This General Permit is both your federal discharge permit and your new state operating permit and replaces all previous state operating permits and letters of approval for the discharges described within. In all future correspondence regarding this permit, please refer to your general permit number as shown on page one of your permit.

If you were affected by this decision, you may appeal to have the matter heard by the administrative hearing commission. To appeal, you must file a petition with the administrative hearing commission within thirty days after the date this decision was mailed or the date it was delivered, whichever date was earlier. If any such petition is sent by registered mail or certified mail, it will be deemed filed on the date it is mailed; if it is sent by any method other than registered mail or certified mail, it will be deemed filed on the date it is received by the administrative hearing commission.

If you have any questions concerning this permit, please do not hesitate to contact the Water Protection Program at PO Box 176, Jefferson City, MO 65102 (573) 751-1300.

Sincerely,

WATER PROTECTION PROGRAM

Robert Mefaki

NPDES Permit and Engineering Section

RECEIVED
REGULATORY BRANCH
07 DEC -5 PM 2:30

Enclosure

Recycled Paper

STATE OF MISSOURI

DEPARTMENT OF NATURAL RESOURCES

MISSOURI CLEAN WATER COMMISSION

MISSOURI STATE OPERATING PERMIT
WATER POLLUTION CONTROL PROGRAM

General Operating Permit

In compliance with the Missouri Clean Water Law, (chapter 644 R.S. Mo. as amended, hereinafter, the Law), and the Federal Water Pollution Control Act (Public Law 92-500, 92nd Congress) as amended,

Permit No.:	MO-R100043
Owner:	U.S. Army Corps of Engineers, KC District
Address:	700 Federal Building, 601 E. 12th Street Kansas City, MO 64106
Continuing Authority:	Same Same
Facility Name:	U.S. Army Corps of Engineers, KC District
Facility Address:	700 Federal Building, 601 E. 12th Street Kansas City, MO 64106
Legal Description:	See Page 2, Various County
Receiving Stream:	See Page 2
First Classified Stream	See Page 2

is authorized to discharge from the facility described herein, in accordance with the effluent limitations and monitoring requirements as set forth herein.

FACILITY DESCRIPTION All Outfalls, SIC 1629

Construction or land disturbance activity (e.g., clearing, grubbing, excavating, grading, and other activity that results in the destruction of the root zone) that are performed by or under contract to a city, county, or other governmental jurisdiction that has a storm water control program for land disturbance activities that has been approved by the Missouri Department of Natural Resources.

This permit authorizes only wastewater, including storm waters, discharges under the Missouri Clean Water Law and the National Pollutant Discharge Elimination System, it does not apply to other regulated areas. This permit may be appealed in accordance with Section 644.051.6 of the Law

May 31, 2007
Effective date

November 30, 2007
Issue date

Doyle Childers, Director, Department of Natural Resources
Executive Secretary, Clean Water Commission

May 30, 2012
Expiration date

Edward Galbraith
Director of Staff, Clean Water Commission

MO 780-1481 (7-94)

This permit accompanies the applicant's General Permit 41 (GP0-41) for the repair of levees due to damages from flooding.

Repair activities may take place anywhere along the Missouri and Grand Rivers and tributaries thereof. Location would be in any county along these waterways from Rulo Nebraska to Saint Louis Missouri.

Detailed receiving stream information is available upon request.

APPLICABILITY

1. This general permit **authorizes** the discharge of storm water and certain non-storm water discharges from land disturbance sites that are performed by or under contract to a city, county, or other governmental jurisdiction that has a storm water control program and/or SWPPP for land disturbance activities that has been approved by the Missouri Department of Natural Resources.

2. If at any time the Missouri Department of Natural Resources determines that the quality of waters of the state may be better protected by requiring the owner/operator of a permitted site to apply for site specific permits, the Department may require a city, county, or other governmental jurisdiction to obtain a site specific operating permit [10 CSR 20-6.010 (13) and 10 CSR 20-6.200(6)].

   The Department may require the permittee to apply for and obtain a site specific or different general permit if:
   a. The permittee is not in compliance with the conditions of this general permit;
   b. The discharge no longer qualifies for this general permit due to changed site conditions and regulations; or
   c. Information becomes available that indicates water quality standards have been or may be violated.

   The Department will notify the permittee in writing if there is a need to apply for a site-specific permit or a different general permit. When a site specific permit or different general permit is issued to the authorized permittee, the permit that has been replaced will be automatically terminated upon the effective date of the site specific or different general permit, whichever the case may be. The permittee shall submit the appropriate forms to the Department to terminate the permit that has been replaced.

3. Any owner/operator authorized by a general permit may request to be excluded from the coverage of the general permit and apply for a site-specific permit [10 CSR 20-6.010 (13) and 10 CSR 20-6.200(6)].

4. The owner of the property and/or right-of-way on which a land disturbance site is located is responsible for compliance with this permit. This remains true in the event the owner chooses to contract for the design and/or construction of a project.

5. This permit does not authorize land disturbance activities in violation of the Historic Preservation Act or the Endangered Species Act.

6. This permit is not transferable to other owners or operators.

EXEMPTIONS FROM STATE PERMIT REQUIREMENTS

1. Sites that discharge all storm water runoff directly to a combined sewer system are exempt from state storm water permit requirements.

2. Land disturbance activities as identified in 10 CSR 20-6.200(1)(B) are exempt from state storm water permit requirements as long as there is no violation of water quality standards.

3. Sites that disturb less than one acre of total land area that are not part of a common plan or sale are exempt from state storm water requirements as long as there is no violation of water quality standards.

4. Agricultural storm water discharges and irrigation return flows are exempt from state storm water permit requirements as long as there is no violation of water quality standards. Animal Feeding Operations (AFO) are not included in the agricultural exemption.

REQUIREMENTS

1. All water pollution controls on site shall conform to the DNR-approved storm water control program and/or SWPPP of the city, county, or other governmental jurisdiction in which such land disturbance activities are occurring. The requirements of the approved storm water control program and/or SWPPP must be at least as stringent and may be more stringent than those described in this permit and 10 CSR 20-6.200. The requirements of the DNR approved program and/or SWPPP are enforceable under this permit. The permittee must conduct inspections of all land disturbance sites as described under Requirements,12. of this permit. If the permittee is a regulated MS4, the approved program and/or SWPPP must comply with the Permittee's MS4 permit.

2. The permittee shall provide a list of active land disturbance sites (of one acre or more) to the department on a quarterly bases. The list shall contain the name of the project, location, receiving stream(s) for each outfall, description of the project, number of acres disturbed, and projected date for completion of the project. The permittee shall submit quarterly reports each January, April, July, and October. The reports must be recieved by the end of the specified month.

3. Discharges shall not cause violations of the Water Quality Standards 10 CSR 20-7.031(3), which states, in part, that no water contaminant, by itself or in combination with other substances, shall prevent the waters of the state from meeting the following conditions:

   a. Waters shall be free from substances in sufficient amounts to cause the formation of putrescent, unsightly or harmful bottom deposits or prevent full maintenance of beneficial uses;
   b. Waters shall be free from oil, scum and floating debris in sufficient amounts to be unsightly or prevent full maintenance of beneficial uses;
   c. Waters shall be free from substances in sufficient amounts to cause unsightly color or turbidity, offensive odor or prevent full maintenance of beneficial uses;
   d. Waters shall be free from substances or conditions in sufficient amounts to have a harmful effect on human, animal or aquatic life.
   e. There shall be no significant human health hazard from incidental contact with the water;
   f. There shall be no acute toxicity to livestock or wildlife watering;
   g. Waters shall be free from physical, chemical or hydrologic changes that would impair the natural biological community;
   h. Waters shall be free from used tires, car bodies, appliances, demolition debris, used vehicles, or equipment and solid waste as defined in Missouri's Solid Waste Law, Section 260.200, RSMo, except as the use of such materials is specifically permitted pursuant to Section 260.200-260.247.

4. Good housekeeping practices shall be maintained by the permittee to keep solid waste from entering waters of the state.

5. The permittee shall comply with all federal and state regulations regarding underground storage, above ground storage, and dispensers of fueling facilities.

6. The permittee shall manage hazardous wastes in accordance with the provisions of the Missouri Hazardous Waste Laws and Regulations. This includes hazardous wastes that are transported, stored, or used for maintenance, cleaning, and repair.

7. The permittee shall designate an individual to be responsible for environmental matters. The individual responsible for environmental matters shall have a thorough and demonstrable knowledge of the site's SWPPP and sediment and erosion control practices in general. The individual responsible for environmental matters or a designated inspector knowledgeable in erosion, sediment,and stormwater control principles, shall inspect all structures that function to prevent pollution of waters of the state.

8. The permittee shall store all paint, solvents, petroleum products and petroleum waste products, and storage containers (such as drums, cans, or cartons) according to best management practices (BMPs). The materials exposed to precipitation shall be stored in watertight, structurally sound, closed containers. All containers shall be inspected for leaks or spillage during the once per week inspection of BMPs.

9. The primary requirement of this permit is the development and implementation of a Storm Water Pollution Prevention Plan (SWPPP). The permittee must retain a copy of the SWPPP on the construction site during normal working hours and make it available to a department representative upon request.

The SWPPP shall:

a. Incorporate required practices identified below,
b. Incorporate erosion control practices specific to site conditions, and
c. Provide for maintenance and adherence to the plan.

Before any land disturbance activity takes place, the permittee shall develop a SWPPP. This plan must be developed before a permit can be issued and made available as specified under RECORDS

The permittee shall fully implement the provisions of the SWPPP required under this part as a condition of this general permit throughout the term of the land disturbance project.

The purpose of the SWPPP is to ensure the design, implementation, management, and maintenance of Best Management Practices (BMPs) in order to reduce the amount of sediment and other pollutants in storm water discharges associated with the land disturbance activities; comply with the Missouri Water Quality Standards; and ensure compliance with the terms and conditions of this general permit.

The permittee shall select, install, use, operate, and maintain appropriate BMPs for the permitted sites. The following manuals are acceptable resources for the selection of appropriate BMPs.

> ***Storm Water Management for Construction Activities: Developing Pollution Prevention Plans and Best Management Practices***, (Document number EPA 832-R-92-005) published by the United States Environmental Protection Agency (USEPA) in 1992. **This manual is available at The USEPA internet site http://cfpub1.epa.gov/npdes/stormwater/swppp.cfm;**

The latest version of ***Protecting Water Quality: A field guide to erosion, sediment and storm water best management practices for development sites in Missouri.*** **This manual is available on the department's internet site at:** http://www.dnr.mo.gov/env/wpp/wpcp-guide.htm

The permittee is not limited to the use of these guidance manuals. Other guidance publications may be used to select appropriate BMPs. However, all BMPs should be described and justified in the SWPPP. EPA and DNR continue to update BMP information on their web sites. It is recommended that the permittee review this information when developing a SWPPP.

10. SWPPP Requirements: The following information and practices shall be provided for in the SWPPP.
    a. Site Description: In order to identify the site, the SWPPP shall include the facility and outfall information provided in the application form. The SWPPP shall have sufficient information to be of practical use to contractors and site construction workers to guide the installation and maintenance of BMPs. Site boundaries and outfalls shall be marked on a site map included as part of the SWPPP.
    b. Selection of Temporary and Permanent Non-Structural BMPs: The permittee shall select appropriate non-structural BMPs for use at the site and list them in the SWPPP. The SWPPP shall require existing vegetation to be preserved where practical. The time period for disturbed areas to be without vegetative cover is to be minimized to the maximum extent practicable. For sites that will be inactive six months or more, establishing a vegetative cover is a highly recommended choice for a proper BMP.

Examples of non-structural BMPs which the permittee should consider specifying in the SWPPP include: preservation of trees and mature vegetation, protection of existing vegetation for use as buffer strips (vegetative buffer strips of 50 feet are especially encourage along drainage courses), mulching, sodding, temporary seeding, final seeding, geotextiles, stabilization of disturbed areas, preserving existing stream channels as overflow areas when channel straightening or shortening is allowed, soil stabilizing emulsions and tackifiers, mulch tackifiers, stabilized site entrances/exits, and other appropriate BMPs.

c. Selection of Temporary and Permanent Structural BMPs: The permittee shall select appropriate structural BMPs for use at the site and list them in the SWPPP. Examples of structural BMPs that the permittee should consider specifying in the SWPPP include: diverting flows from undisturbed areas away from disturbed areas, silt (filter fabric and/or straw bale) fences, earthen diversion dikes, drainage swales, sediment traps, rock check dams, subsurface drains (to gather or transport water for surface discharge elsewhere), pipe slope drains (to carry concentrated flow down a slope face), level spreaders (to distribute concentrated flow into sheet flow), storm drain inlet protection and outlet protection, reinforced soil retaining systems, gabions, temporary or permanent sediment basins, and other appropriate BMPs.

d. Description of Best Management Practices: The SWPPP shall include a description of both structural and non-structural BMPs that will be used at the site. The SWPPP shall provide the following general information for each BMP which will be used one or more times at the site:

i. Physical description of the BMP,
ii. Site and physical conditions that must be met for effective use of the BMP,
iii. BMP installation/construction procedures, including typical drawings, and
iv. Operation and maintenance procedures for the BMP.

The SWPPP shall provide the following information for each specific instance where a BMP is to be installed:

vi. Whether the BMP is temporary or permanent,
vii. Where, in relation to other site features, the BMP is to be located,
viii. When the BMP will be installed in relation to each phase of the land disturbance procedures to complete the project, and
viiii. What site conditions must be met before removal of the BMP if the BMP is not a permanent BMP.

e. Discharges to Valuable Resource Waters:

Storm water discharges as described in 10.e.1, 10.e.2, and 10.e.3 shall be considered discharges to "valuable resource waters".

1. Storm water discharges within 1000 stream feet of: Streams identified as a losing stream*,

   i. Streams or lakes listed as an outstanding national or state resource water*,
   ii. Reservoirs or lakes used for public drinking water supplies*; or
   iii. Streams, lakes or reservoirs identified as critical habitat for endangered species*;
   iv. Streams, lakes, or reservoirs listed as impaired for sediment and/or an unknown pollutant by standard MDNR methodology.*

2. Storm water discharges:

   i. Within 100 stream feet of a permanent stream (class P) or major reservoir (class L2)*, or
   ii. Within two stream miles upstream of biocriteria reference locations*.

3. Storm water discharges where:

   i. Any of the disturbed area is defined as a wetland (Class W), by 10 CSR 20-7.031(1)(F)7*;or
   ii. The storm water discharges to a sinkhole or other direct conduit to groundwater.

f. Total Settable Solids from a storm water outfall must not exceed 2.5 ml/L/hr.

g. If the disturbed area discharges to a valuable resource water, Total Settable Solids shall not exceed 0.5 ml/L/hr,

(For the purpose of this permit, the term "stream feet" shall mean the distance in feet following the nearest drainage channel from the land disturbance to the valuable resource water.)

* Identified or described in 10 CSR 20, Chapter 7. These regulations are available at many libraries and may be purchased from MDNR by calling the Water Pollution Control Program at (573)751-1300. The regulations are also available from the Missouri Secretary of States Office.

h Disturbed Areas: Slopes for disturbed areas must be defined in the SWPPP. A site map or maps, defining the sloped areas for all phases of the project, must be included in the SWPPP. Where soil disturbing activities cease in an area for 14 days or more, the permittee shall construct BMPs to establish interim stabilization. Interim stabilization shall consist of well established and maintained BMPs that are reasonably certain to protect waters of the state from sediment pollution. These BMPs may include a combination of sediment basins, check dams, sediment fences, and mulch. The types of BMPs used must be suited to the area disturbed, taking into account the number of acres exposed and the steepness of the slopes. If the slope of the area is greater than 3:1 (3 feet horizontal to 1 foot vertical) or if the slope is greater than 3% and greater than 150 feet in length, then the permittee must establish interim stabilization within 7 days of ceasing operations on that part of the site. Delays in work caused by inclement weather or equipment malfunction are not considered "ceasing operations" for the purpose of this section, as long as work resumes as soon as possible.

i. Installation: The permittee shall ensure the BMPs are properly installed at the locations and relative times specified in the SWPPP. Peripheral or border BMPs to control runoff from disturbed areas shall be installed or marked for preservation before general site clearing is started. Storm water discharges from disturbed areas, which leave the site, shall pass through an appropriate impediment to sediment movement, such as a sedimentation basin, sediment traps, silt fences, etc. prior to leaving the land disturbance site. A drainage course change shall be clearly marked on a site map and described in the SWPPP. The location of all BMPs must be indicated on a site map, included in the SWPPP.

j. Sedimentation Basins: The SWPPP shall require a sedimentation basin for each drainage area with 10 or more acres disturbed at one time. The sedimentation basin shall be sized to contain a volume of at least 3600 cubic feet per each disturbed acre draining thereto. Accumulated sediment shall be removed from the basin as needed to ensure the minimum volume of 3600 cubic feet is maintained. Discharges from the basin shall not cause scouring of the banks or bottom of the receiving stream. The SWPPP shall require the basin be maintained until final stabilization of the disturbed area served by the basin.

Where use of a sediment basin of this size is impractical, the SWPPP shall evaluate and specify other similarly effective BMPs to be employed to control erosion and sediment delivery. These similarly effective BMPs shall be selected from appropriate BMP guidance documents authorized by this permit. The BMPs must provide equivalent protection. The SWPPP shall require both temporary and permanent sedimentation basins to have a stabilized spillway to minimize the potential for erosion of the spillway or basin embankment.

k. Dewatering: The SWPPP shall require a description of any anticipated dewatering methods, including the anticipated volume of water to be discharged and the anticipated maximum flow discharged from these dewatering activities, expressed in gallons per minute. Maximum flow may be stated in the SWPPP as an estimate based on the type and capacity of equipment being used for dewatering. The SWPPP shall call for specific BMPs designed to treat water pumped from excavations and in no case shall this water be pumped off site without being treated by the specified BMPs.

l. Roadways: Where applicable, upon installation of or connection to roadways, all efforts should be made to prevent the deposition of earth and sediment onto roadways through the use of proper BMPs. Where sediment is present on roadways all storm water curb inlets shall have inlet protection. Where storm water will flow off the end of where a roadway terminates, a sediment catching BMP (ex. gravel berm, silt fence, etc.) shall be provided. Roadways and curb inlets shall be cleaned weekly or following a rainfall that generates a run-off. Stabilized construction entrances shall be used to prevent sediment trackout.

11. Amending/Updating the SWPPP: The permittee shall amend and update the SWPPP as appropriate during the term of the land disturbance activity. The permittee shall amend the SWPPP, at a minimum, whenever the:

    a. Design, operation, or maintenance of BMPs is changed;
    b. Design of the construction project is changed that could significantly affect the quality of the storm water discharges;
    c. Permittee's inspections indicate deficiencies in the SWPPP or any BMP;
    d. MDNR notifies the permittee in writing of deficiencies in the SWPPP;
    e. SWPPP is determined to be ineffective in significantly minimizing or controlling erosion and sedimentation (e.g., there is visual evidence, such as excessive site erosion or excessive sediment deposits in streams or lakes);
    f. Total Settleable Solids from a storm water outfall exceed 2.5 mg/L/hr (or 0.5 mg/L/hr if discharged to a valuable resource water);
    g. MDNR determines violations of Water Quality Standards may occur or have occurred.

12. Site Inspections Reports: Regularly scheduled inspections shall be at a minimum once per seven calendar days. These inspections shall be conducted by the person responsible for environmental matters at the site, or a person trained by and directly supervised by the person responsible for environmental matters at the site. For disturbed areas that have not been finally stabilized, all installed BMPs and other pollution control measures shall be inspected for proper installation, operation and maintenance. All storm water outfalls shall be inspected for evidence of erosion or sediment deposition. The receiving stream shall also be inspected for 50 feet downstream of the outfall. Any problems shall be noted in an inspection report and corrected within seven calendar days of the inspection. If a rainfall causes storm water runoff to occur on site, the BMPs must be inspected within a reasonable time period (not to exceed 48 hours). The SWPPP must explain how the person responsible for erosion control, will be notified when storm water runoff occurs. If weather conditions make it impossible to correct the problem within seven days, a detailed report of the problem(including pictures), must be filed with the regular inspection reports. The permittee shall correct BMP malfunctions as soon as weather conditions allow. Parts of the site that have been finally stabilized may be inspected once per month. (A once per month inspection schedule may be implemented for a site with interim stabilization if the permittee makes a written request for the schedule and it is approved by the Department.)A log of each inspection shall be kept. The inspection report is to include the following minimum information: inspector's name, date of inspection, observations relative to the effectiveness of the BMPs, actions taken or necessary to correct problems, and listing of areas where land disturbance operations have permanently or temporarily stopped. The inspection report shall be signed by the permittee or by the person performing the inspection if duly authorized to do so.

13. Proper Operation and Maintenance: The permittee shall at all times maintain all pollution control measures and systems in good order to achieve compliance with the terms of this general permit.

14. Public Notification: The permittee shall post a copy of the public notification sign described by the department on the information board at the main entrance to the site. The public notification sign must remain posted at the site until the site has been finally stabilized.

OTHER DISCHARGES

1. Hazardous Substance and Oil Spill Reporting: Refer to Section B, #14 of Part I of the Standard Conditions that accompany this permit.

2. Removed substances: Refer to Section B, #6 of Part I of the Standard Conditions that accompany this permit.

3. Change in discharge: In the event soil contamination or hazardous substances are discovered at the site during land disturbance activities, the permittee shall notify the MDNR regional office by telephone as soon as practicable and no later than 24 hours after discovery. The permittee must also notify the MDNR regional office in writing no later than 14 calendar days after discovery.

SAMPLING REQUIREMENTS AND EFFLUENT LIMITATIONS

1. Discharges shall not violate Water Quality Standards 10 CSR 20-7.031(3).
Total Settable Solids shall not exceed a maximum of 2.5 ml/L/hr. for each storm water outfall. If there is a discharge to valuable resource waters, Total Settable Solids shall not exceed a maximum of 0.5 ml/L/hr.

2. There are no regular sampling requirements in this permit. However, the Department may require sampling and reporting as a result of illegal discharges, compliance issues, complaint investigations, or other such evidence of off-site contamination from activities at the site. If such an action is needed, the Department will specify in writing any additional sampling requirements, including such information as location, extent, and parameters.

RECORDS

1. The permittee shall retain copies of this general permit, the SWPPP and all amendments for the site named in the State Operating Permit, results of any monitoring and analysis, and all site inspection records required by this general permit. The records shall be accessible during normal business hours. The records shall be retained for a period of at least three years from the date of the Letter of Termination.

2. The permittee shall provide a copy of the SWPPP to MDNR, USEPA, or any local agency or government representative if they request a copy in the performance of their official duties.

3. The permittee shall provide those who are responsible for installation, operation, or maintenance of any BMP a copy of the SWPPP.

4. The permittee, their representative, and/or the contractor(s) responsible for installation, operation, and maintenance of the BMPs shall have a current copy of the SWPPP with them when on the project site.

TERMINATION

This permit may be terminated upon the request of the applicant when all sites have been stabilized. A site is considered to be stabilized when either perennial vegetation, pavement, buildings, or structures using permanent materials cover all areas that have been disturbed. With respect to areas that have been vegetated, vegetative cover shall be at least 70% of fully established plant density over 100% of the disturbed area.

In order to terminate the permit, the permittee shall notify MDNR by submitting Form H,

included with the State Operating Permit. The permittee shall complete Form H and mail it to MDNR at the address noted in the cover letter of this permit.

This general permit will expire five years from the effective date of the permit (see page 1). The issue date is the date the State Operating Permit is issued to the applicant. The expiration date may or may not coincide with the date when the authorized project or development is scheduled for completion.

If the project or development completion date will be after the expiration date of this general permit, then the permittee must reapply to the department for the permit to be re-issued. The permittee will receive notification of the expiration date of the permit before the expiration date listed on page 1 of this permit. In order for the permit to be re-issued, the permittee should submit the appropriate application form(s) at least 180 days before the expiration of the permit if land disturbance activity is expected to continue past the expiration date of this general permit.

If the permittee does not apply for the renewal of this permit, this permit will automatically terminate on the expiration date. Continued discharges from a site that has not been fully stabilized are prohibited beyond the expiration date; unless the permit is reissued or the permittee has filed a timely application for the reissuance of this permit.

DUTY TO COMPLY

The permittee shall comply with all conditions of this general permit. Any noncompliance with this general permit constitutes a violation of Chapter 644, Missouri Clean Water Law, and 10 CSR 20-6.200. Noncompliance may result in enforcement action, termination of this authorization, or denial of the permittee's request for renewal.

MAILING ADDRESS

PUBLIC NOTICE

Permit No. GP-41 (2007-2078)
Issue Date: March 21, 2008

US Army Corps
of Engineers
Kansas City District

STATES OF MISSOURI AND KANSAS - Including INDIAN COUNTRY
ISSUANCE OF GENERAL PERMIT (GP) 41
FLOOD RECOVERY AND REPAIR ACTIVITIES

The U.S. Army Corps of Engineers, Kansas City District **HAS ISSUED** GP-41 (copy enclosed) for protection and repair of existing flood damaged structures, damaged land areas and damaged fills, under authority of Section 10 of the Rivers and Harbors Act of 1988 (33 USC 403) and Section 404 of the Clean Water Act (33 USC 1344).

Duration of this General Permit: This GP is issued and is in effect for five (5) years, from March 21, 2008 until March 21, 2013, unless revoked or specifically extended.

Notification Procedures (Post and Preconstruction): Preconstruction notification is required by the General Public for all activities involving obtaining borrow from forested wetlands, borrowing material from potential migratory bird nesting areas, clearing trees along stream channels, working in areas with known exotic species, and/or if the proposed repair activity includes restoration of a stream channel back to the original, pre-flood location. Other authorized activities that meet the terms and limits of this GP may proceed without preconstruction notification to the Corps of Engineers. However, post construction reporting is required for all activities undertaken under this GP. See GP Special condition "d" and Appendix I for more information on notification requirements.

APPLICANT: General Public

PROJECT LOCATION: In waters of the United States in the States of Missouri and Kansas, including Indian Country within Kansas boundaries that are declared flood disaster areas by the Governor of either state and/or the President of the United States of America.

AUTHORITY: Section 10 of the Rivers and Harbors Act of 1988 (33 USC 403) and Section 404 of the Clean Water Act (33 USC 1344).

ACTIVITY: Excavation or placement of fill material for protection and/or repair of existing flood damaged structures, damaged land areas and/or damaged fills as follows: a. Repair of levees to existing elevations and cross-section, including breach closures and borrow operations, b. Bridge embankment protection (armoring) and/or repair, c. Repair of pre-existing highway or railroad embankments and the addition or repair of stone (armoring) protection, d. Repair of pre-existing utility protection structures, e. Placement of rock and/or earth materials for stream/ditch bank protection and/or stream/ditch bank restoration, f. Drainage channel/ditch restoration to

pre-flood capacity and flow line unless the flow line must be altered due to other damage associated with the flood event, g. Restoration of creek channels to pre-flooding alignment and capacity, and h. Construction of temporary roads and temporary fills to facilitate the completion of any of the listed activities.

Note: Maintenance of existing flood damaged structures and/or flood damaged fills, which have been previously authorized, may be authorized by Nationwide Permit No. 3 or exempted by Part 323.4 of Federal regulations 33 CFR 320-331. The repair of uplands damaged by storms, floods or other discrete events may be authorized by Nationwide Permit No. 45 upon notification and review by the appropriate Corps of Engineers District, Regulatory Branch.

INDIAN COUNTRY: Work under this permit is not authorized in Indian Country until the applicant obtains individual Section 401 Water Quality Certification from the U.S. Environmental Protection Agency (EPA), Region VII, Watershed Planning and Implementation Branch, 901 North 5th Street, Kansas City, Kansas 66101 (913-551-7003).

EPA may issue programmatic water quality certification during the authorization period of this permit which ends December 31, 2013. If issued, the Corps of Engineers will announce by public notice and post that certification to the Regulatory Program webpage: http://www.nwk.usace.army.mil/regulatory/regulatory.htm.

SECTION 401 WATER QUALITY CERTIFICATION: Conditions of any individual or programmatic Section 401 Water Quality Certifications issued by the Missouri Department of Natural Resources (MDNR - for Missouri), Kansas Department of Health and Environment (KDHE - for Kansas), and EPA (for Indian Country) are conditions of this GP. General Condition 5 of the GP states: "If a conditioned water quality certification has been issued for your project, you must comply with the conditions specified in the certification as special conditions to this permit."

ADDITIONAL INFORMATION: Additional information about this general permit may be obtained by contacting Mr. Douglas R. Berka, Regulatory Project Manager, Kansas City District Regulatory Branch (ATTN: OD-R) 700 Federal Building, Kansas City, Missouri 64106, at 816-389-3657 or via email at Douglas.R.Berka@usace.army.mil. All inquiries concerning this public notice should be directed to the above address.

Enclosure

DEPARTMENT OF THE ARMY PERMIT

Permittee General Public

Permit No. NWK GP-41

Issuing Office U.S. Army Corps of Engineers, Kansas City District

NOTE: The term "you" and its derivatives, as used in this permit, means the permittee or any future transferee. The term "this office" refers to the appropriate district or division office of the Corps of Engineers having jurisdiction over the permitted activity or the appropriate official of that office acting under the authority of the commanding officer.

You are authorized to perform work in accordance with the terms and conditions specified below.

Project Description: To excavate or place fill material for protection and/or repair of existing flood damaged structures, damaged land areas and/or damaged fills as follows:

a. Repair of levees to existing elevations and cross-section, including breach closures and borrow operations
b. Bridge embankment protection (armoring) and/or repair
c. Repair of pre-existing highway or railroad embankments and the addition or repair of stone (armoring) protection
d. Repair of pre-existing utility protection structures
e. Placement of rock and/or earth materials for stream/ditch bank protection and/or stream/ditch bank restoration
f. Drainage channel/ditch restoration to pre-flood capacity and flow line unless the flow line must be altered due to other damage associated with the flood event
g. Restoration of creek channels to pre-flooding alignment and capacity
h. Construction of temporary roads and temporary fills to facilitate the completion of any of the listed activities

Note: Maintenance of existing flood damaged structures and/or flood damaged fills, which have been previously authorized, may be authorized by Nationwide Permit No. 3 or exempted by Part 323.4 of Federal regulations 33 CFR 320-331. The repair of uplands damaged by storms, floods or other discrete events may be authorized by Nationwide Permit No. 45 upon notification and review by the appropriate Corps of Engineers District, Regulatory Branch.

Project Location: In Waters of the United States, (rivers, lakes, streams, and wetlands) within the State of Kansas, including Indian Country, and within the State of Missouri that are declared flood disaster areas by the Governor of either state and/or the President of the United States.

Permit Conditions:

General Conditions:

1. The time limit for completing the work authorized ends on December 31, 2013. If you find that you need more time to complete the authorized activity, submit your request for a time extension to this office for consideration at least one month before the above date is reached.

2. You must maintain the activity authorized by this permit in conformance with the terms and conditions of this permit. You are not relieved of this requirement if you abandon the permitted activity, although you may make a good faith transfer to a third party in compliance with General Condition 4 below. Should you wish to cease to maintain the authorized activity or should you desire to abandon it without a good faith transfer, you must obtain a modification of this permit from this office, which may require restoration of the area.

3. If you discover any previously unknown historic or archeological remains while accomplishing the activity authorized by this permit, you must immediately notify this office of what you have found. We will initiate the Federal and state coordination required to determine if the remains warrant a recovery effort or if the site is eligible for listing in the National Register of Historic Places.

4. If you sell the property associated with this permit, you must obtain the signature of the new owner in the space provided and forward a copy of the permit to this office to validate the transfer of this authorization.

5. If a conditioned water quality certification has been issued for your project, you must comply with the conditions specified in the certification as special conditions to this permit. For your convenience, a copy of the certification is attached if it contains such conditions.

6. You must allow representatives from this office to inspect the authorized activity at any time deemed necessary to ensure that it is being or has been accomplished in accordance with the terms and conditions of your permit.

Special Conditions:

See continuation sheets, pages 4, 5, and 6 of this document.

Further Information:

1. Congressional Authorities: You have been authorized to undertake the activity described above pursuant to:

(x) Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. 403).

(x) Section 404 of the Clean Water Act (33 U.S.C. 1344).

( ) Section 103 of the Marine Protection, Research and Sanctuaries Act of 1972 (33 U.S.C. 1413).

2. Limits of this authorization.

a. This permit does not obviate the need to obtain other Federal, state, or local authorization required by law.

b. This permit does not grant any property rights or exclusive privileges.

c. This permit does not authorize any injury to the property or rights of others.

d. This permit does not authorize interference with any existing or proposed Federal project.

3. Limits of Federal Liability. In issuing this permit, the Federal Government does not assume any liability for the following:

a. Damages to the permitted project or uses thereof as a result of other permitted or unpermitted activities or from natural causes.

b. Damages to the permitted project or uses thereof as a result of current or future activities undertaken by or on behalf of the United States in the public interest.

c. Damages to persons, property, or to other permitted or unpermitted activities or structures caused by the activity authorized by this permit.

d. Design or construction deficiencies associated with the permitted work.

e. Damage claims associated with any future modification, suspension, or revocation of this permit.

4. Reliance on Applicant's Data: The determination of this office that issuance of this permit is not contrary to the public interest was made in reliance on the information you provided.

5. Reevaluation of Permit Decision. This office may reevaluate its decision on this permit at any time the circumstances warrant. Circumstances that could require a reevaluation include, but are not limited to, the following:

a. You fail to comply with the terms and conditions of this permit.

b. The information provided by you in support of your permit application proves to have been false, incomplete, or inaccurate (See 4 above).

c. Significant new information surfaces which this office did not consider in reaching the original public interest decision.

Such a reevaluation may result in a determination that it is appropriate to use the suspension, modification, and revocation procedures contained in 33 CFR 325.7 or enforcement procedures such as those contained in 33 CFR 326.4 and 326.5. The referenced enforcement procedures provide for the issuance of an administrative order requiring you to comply with the terms and conditions of your permit and for the initiation of legal action where appropriate. You will be required to pay for any corrective measures ordered by this office, and if you fail to comply with such directive, this office may in certain situations (such as those specified in 33 CFR 209.170) accomplish the corrective measures by contract or otherwise and bill you for the cost.

6. Extensions. General condition 1 establishes a time limit for the completion of the activity authorized by this permit. Unless there are circumstances requiring either a prompt completion of the authorized activity or a reevaluation of the public interest decision, the Corps will normally give favorable consideration to a request for an extension of this time limit.

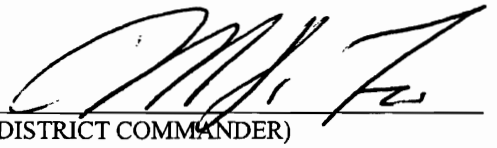
Your signature below, as permittee, indicates that you accept and agree to comply with the terms and conditions of this permit.

General Public – Signature Not Required

_____ _____

(PERMITTEE) (DATE)

This permit becomes effective when the Federal official, designated to act for the Secretary of the Army, has signed below.



21 March 2008

(DISTRICT COMMANDER) (DATE)
ROGER A. WILSON, JR.
BY: MARK D. FRAZIER
Chief, Regulatory Branch
Operations Division

When the structures or work authorized by this permit are still in existence at the time the property is transferred, the terms and conditions of this permit will continue to be binding on the new owner(s) of the property. To validate the transfer of this permit and the associated liabilities associated with compliance with its terms and conditions, have the transferee sign and date below.

_____ _____

(TRANSFEREE) (DATE)

Special Conditions:

a. You must sign and return the attached "Compliance Certification" after the authorized work and any required mitigation is completed. Your signature will certify that you completed the work in accordance with this permit, including the general and the special conditions, and that any required mitigation was completed in accordance with the permit conditions.

b. (**Activities occurring in navigable waters under Section 10 of the Rivers and Harbors Act of 1899 Only**) The permittee understands and agrees that, if future operations by the United States require the removal, relocation, or other alteration, of the structure or work herein authorized, or if, in the opinion of the Secretary of the Army or his authorized representative, said structure or work shall cause unreasonable obstruction to the free navigation of the navigable waters, the permittee will be required, upon due notice from the Corps of Engineers, to remove, relocate, or alter the structural work or obstructions caused thereby, without expense to the United States. No claim shall be made against the United States on account of any such removal or alteration.

c. If any part of the authorized work is performed by a contractor, before starting work you must discuss the terms and conditions of this permit with the contractor; and, you must give a copy of this entire permit to the contractor.

d. You must contact the Corps of Engineers, submit application materials outlined in Appendix I, and you must submit a mitigation plan prior to completing any flood recovery/repair activity when the repair involves obtaining borrow from forested wetland, borrowing material from potential migratory bird nesting areas, clearing trees along stream channels, working in areas with known exotic species, and/or if the proposed repair activity includes restoration of a stream channel back to the original, pre-flood location. All other flood repair activities, including all repairs supervised by the Corps of Engineers, pursuant to Public Law 84-99 and/or all repairs supervised by the United States Department of Agriculture, pursuant to the Emergency Watershed Protection Program or to the Emergency Conservation Program can be completed without pre-construction notification to the Corps of Engineers. However, all completed flood repair work, authorized by this permit, must be reported to the Corps of Engineers, Regulatory Branch, within 60 days of completing the project. The report must include the location of the work, as-built drawings of the structure(s) and/or fill(s), and a discussion of the avoidance and minimization measures incorporated into the project and mitigation measures employed.

e. You must NOT dredge or excavate from the Missouri River or from the Kansas River in order to obtain borrow material for any flood repair project authorized by this permit.

f. You must employ measures to prevent spilled fuels, lubricants, excessive suspended solids including dredged material, and/or wet concrete from entering the waters of the United States and formulate a contingency plan to be effective in the event of a spill.

g. You must use clean, uncontaminated materials for fill in order to minimize excessive turbidity by leaching of fines, as well as to preclude the entrance of deleterious and/or toxic materials into the waters of the United States by natural runoff or by leaching. Use of small aggregate material less than 20 lbs per aggregate, such as creek gravel, for stabilization and erosion control is prohibited.

h. You must excavate or fill in the watercourse so as to minimize increases in suspended solids and turbidity which may degrade water quality and damage aquatic life outside the immediate area of operation. Activities should be conducted during low water periods and outside major spawning season for fish, unless a waiver is obtained from the Corps of Engineers. Crossings of waterways and use of construction machinery in waterways should be limited to the minimum extent necessary.

i. You must immediately remove and properly dispose of all debris during every phase of the project in order to prevent the accumulation of unsightly, deleterious and/or toxic materials in or near the water body. All construction debris must be disposed of in an upland site, outside the floodplain, and in such a manner that it cannot enter into a waterway or into a wetland.

j. You must store all construction materials, equipment, and/or petroleum products, when not in use, above anticipated high water levels.

Special Conditions (continued):

k. You must restrict the clearing of timber and other vegetation to the absolute minimum required to accomplish the work. You must avoid the removal of mature trees to prevent potential impacts to bald eagle roost sites. Work should be limited to one side of the channel only. However, work from both sides of the channel is permitted if it is demonstrated that it results in minimizing tree clearing. Vegetated riparian buffer areas should be included along both sides of any channel restoration projects. All wooded areas cleared for site access must be allowed to return to forested habitat. Mitigation may be required for other timber clearing.

l. Upon completion of earthwork operations, you must seed, replant or otherwise protect from erosion all fills in the water or on shore, and other areas on shore disturbed during construction. If seeding does not successfully stabilize the disturbed soil areas by the end of the first growing season, you must implement alternate measures, such as placing riprap, slope terracing with untreated railroad ties, gabions or concrete blocks, or additional vegetative plantings, to protect the disturbed areas from further erosion. Clearing, grading, and replanting should be planned and timed so that only the smallest area is in a bare soil condition. You must contact the Corps of Engineers prior to beginning work on any additional erosion control measures so that we can determine if additional authorization is required.

m. You must dispose of excess concrete and wash water from concrete trucks and other concrete mixing equipment in an upland area above the ordinary high water mark and at a location where the concrete and wash water cannot enter the water body or an adjacent wetland area.

n. You must not dispose of any construction debris or waste materials below the ordinary high water mark of any water body, in a wetland area, or at any location where the materials could be introduced into the water body or an adjacent wetland as a result of runoff, flooding, wind, or other natural forces.

o. You must use only graded rock, quarry-run rock and/or clean concrete rubble for riprap. The material must be reasonably well graded, consisting of pieces varying in size from 20 pounds up to and including at least 150 pound pieces. Generally, the maximum weight of any piece should not be more than 500 pounds. Gravel and dirt should not exceed 15% of the total fill volume. If you use concrete rubble, you must break all large slabs to conform to the well graded requirement, and remove all exposed reinforcement rods, trash, asphalt, and other extraneous materials before you place the rubble in the waters of the United States. Size and gradation requirements can be changed provided approval is received from the Corps' Regulatory Branch prior to placement.

p. You must completely remove all temporary fills, including sand bags (to the extent practicable), in the Waters of the United States within 30 days of the end of the flood emergency and disposed of in accordance with special condition "h" above, unless the temporary fill is to be incorporated in the final repair of the structure. If sand bags are needed for a longer duration until permanent repairs are made, you must request a waiver of this condition in writing. Temporary construction of levees to protect agricultural land in areas where no levees previously existed, are not authorized.

q. You must avoid impacts to wetlands to the fullest extent practicable. When wetlands impacts are unavoidable, borrow site selection will be based on the following order of preference: upland (non-wetland) sources, areas riverward of the levee previously used for borrow, open prior converted cropland, farmed wetlands, or other authorized excavation sites. You must mitigate for all unavoidable proposed wetland excavation or fill activities authorized by this permit. You must develop mitigation plans on a case-by-case basis which must be approved by the Corps. This permit does not authorize actions designed to drain or otherwise convert wetlands to other uses, nor actions where a practicable alternative to impacting wetlands is available unless the Corps of Engineers, in consultation with other resource agencies, determine that sediment removal from existing wetlands will restore wetland functions and create valued habitat diversity. All borrow areas should have 5:1 horizontal to vertical side slopes and the water depth should be three feet deep or less under normal circumstances.

r. You must place all fills and structures such that they do not result in stream channel constriction or in redirection of flows in such a way as to cause upstream or downstream erosion. Channelization projects or shortening of waterways, other than restoration of creek channels to pre-flood alignment, are not authorized.

s. You must not undertake actions that are likely to jeopardize the existence of a threatened or endangered species or a species proposed for such designation as defined in the Federal Endangered Species Act, nor actions which are likely to destroy or adversely modify the critical habitat of such species. If the project requires the removal of mature trees along stream channels or from forested wetland you must contact the Corps of Engineers prior to any tree clearing activity.

Special Conditions (continued):

t. You must avoid activity in the proximity of a property listed in or eligible for listing in the National Register of Historic Places unless, after coordination with the State Historic Preservation Office of the affected state and/or the Advisory Council on Historic Preservation, a determination of "no effect" or "no adverse effect" is made in accordance with criteria established by 36 CFR 800. If an inadvertent discovery of any cultural or archaeological resource occurs you must immediately contact this office and you should suspend work in the area until a determination of eligibility for listing on the National Register of Historic Places is completed and any necessary consultation under Section 106 of the National Historic Preservation Act is completed.

u. You must not undertake any activity that results in a new structure or replacement of a previously authorized structure with an increase in scope or design of the original structure. Small changes that do not affect elevations, such as the reconstruction of a levee around a scour hole at pre-existing elevations, and that do not convert wetland to upland (non-wetland) or a different wetland use beyond what is unavoidable such as to go around a scour hole, may be authorized upon notification to the Corps. Levee breach repairs constructed on new alignments must be setback farther from the stream channel than the original alignment.

v. You must contact the Missouri Department of Natural Resources, Water Pollution Control Program, P.O. Box 176, Jefferson City, Missouri 65102-0176, or the Kansas Department of Health and Environment, Bureau of Water, Curtis State Office Building, 1000 Southwest Jackson, Topeka, Kansas 66612, in order to determine the need for a state permit for land disturbance, return water, or other activities that normally require such permits. Use of GP-41 shall not be construed or interpreted to imply the requirements for other permits are replaced or superseded. Any national pollutant discharge elimination system (NPDES) permits, general permits for land disturbance, or other requirements shall be complied with.

w. You must notify the Corps of Engineers if one of the following common exotic species occurs in the project area. The zebra mussel *(Dreissena polymorpha)*, Eurasian watermilfoil *(Myriophyllum spicatum)*, purple loosestrife *(Lythrum salicaria)*, Johnson grass *(Sorghum halepense)*, sericia lespedeza *(Lespedeza cuneata)*, salt cedar *(Tamarix spp.)*, and reed canary grass *(Phalaris arundinacea)*. You must take appropriate actions to insure the prevention of the spread of any exotic species. The following best management practice can help prevent the spread of these species. Equipment brought on the project site should be washed to remove dirt, seeds and plant parts. If the equipment has been used in a body of water in the last 30 days it can be washed at a commercial car wash or dried for five or more days before using the equipment in another body of water. In addition, before transporting equipment from the project site visible water, mud, plants and animals should be removed. Waters that the zebra mussel is known to inhabit in Kansas and in Missouri can be found at the following website: http://nas.er.usgs.gov/queries/zmbyst.asp

x. For activities occurring in Indian Country, you must request and obtain individual Section 401 Water Quality Certification from the Environmental Protection Agency (EPA). You may contact the EPA by writing US EPA, Region 7 Tribal Coordinator, 901 North 5th Street, Kansas City, Kansas 66101, or by calling (913) 551-7498. You must receive Section 401 Water Quality Certification, and comply with the conditions of that certification, during performance of any work under this permit. Should EPA issue programmatic certification for this GP during the term of the GP, the Corps will issue a supplemental public notice and General Condition 5 of the permit applies.

APPENDIX I

Criteria for Authorization by General Permit NWKGP-41

1. This general permit authorizes activities proposed by the general public, railroads, transportation departments, pipeline and utility companies, and government agencies.

2. If you propose to work under the authority of this General Permit and the project requires preconstruction notification as outlined in special condition "d" of the permit, you must notify the appropriate Corps of Engineers district within 18 months of the end of the flood emergency (when the nearest river gauge drops below flood stage for two months), and receive authorization prior to starting work in the Corps jurisdiction. You must submit the following information:

a. A completed application form ENG 4345 or a letter which includes all information required by form ENG 4345. The ENG 4345 is available at: www.nwk.usace.army.mil/regulatory/regulatory.htm

b. You must clearly describe the proposed work so we can clearly and readily determine whether or not the proposed work complies with the General Permit.

c. The flood repair activities must be in counties declared disaster areas by the Governor of the State of Kansas, the Governor of the State of Missouri and/or the President of the United States.

d. An 8 1/2" x 11" drawing(s) showing the details of the proposed work.

e. An 8 1/2" x 11" map with the location of the proposed project clearly marked, including the Section, Township, and Range or the Latitude and Longitude location (decidegrees).

f. Discussion of possible alternatives and why they were not selected.

g. Also, as project proponent, you must send copies concurrently to the following addresses, but we will not necessarily solicit comments from these agencies. We will give these agencies an opportunity to request that we take discretionary authority to require that you apply for an individual permit, if a potential significant problem is identified.

1. For projects in Missouri contact:

U.S. Fish and Wildlife Service
Columbia Field Office
101 Park DeVille Drive, Suite A
Columbia, Missouri 65203
(573) 234-2132

U.S. Environmental Protection Agency
Watershed Planning and Implementation Branch
901 North Fifth Street
Kansas City, Kansas 66101.
(913) 551-7003

Missouri Department of Natural Resources
Water Pollution Control Branch
P.O. Box 176
Jefferson City, Missouri 65102
1-800-361-4827 or (573) 751-1300

Missouri Department of Natural Resources
Historic Preservation Program
P.O. Box 176
Jefferson City, Missouri 65102
(573) 751-7958

Missouri Department of Conservation
Policy Coordination
P.O. Box 180
Jefferson City, Missouri 65102-0180
(573) 522- 5115

* Federal Emergency Management Agency
Region VII
9221 Ward Parkway, Suite 300
Kansas City, Missouri 64114-3372
(816) 283-7063

2. For projects in Kansas contact:

U.S. Fish and Wildlife Service
Manhattan Field Office
2609 Anderson Avenue
Manhattan, Kansas 66502
(785) 539-3474

Kansas Department of Health and Environment
Bureau of Water
Curtis State Office Building
1000 Southwest Jackson Street
Topeka, Kansas 66612
(785) 296-1500

Kansas Department of Wildlife and Parks
512 Southeast 25th Avenue
Pratt, Kansas 67124
(620) 672-5911

* Federal Emergency Management Agency
Region VII
9221 Ward Parkway, Suite 300
Kansas City, Missouri 64114-3372
(816) 283-7063

* You must contact FEMA for all proposed development located in the 100-year floodplain of a National Flood Insurance Program (NFIP) participating community in order to comply with local floodplain management regulations and secure a floodplain development permit from that community.

3. For projects not requiring pre-construction notification, a report of the completed repair activities must be submitted that includes the location of the work, as-built drawings of the structure(s) and/or fill(s), and a discussion of the avoidance and minimization measures incorporated into the project and mitigation measures employed.

4. We may reevaluate the cumulative impacts of this general permit at our discretion at any time. We will reevaluate cumulative impacts at least every five (5) years.

5. The following is a list of flood damaged structures, damaged land areas and/or damaged fills authorized to be repaired under this general permit:

a. Repair of levees to existing elevations, including breach closures and borrow operations

b. Bridge embankment protection (armoring) or repair

c. Repair of pre-existing highway and/or railroad embankments and armor protection

d. Repair of pre-existing utility protection structures

e. Placement of rock and/or earth materials for emergency bank protection or restoration

f. Drainage ditch restoration to pre-flood capacity and flow line unless the flow line must be altered due to other damage associated with the flood event

g. Restoration of creek channels to pre-flooding alignment, capacity and flow line

h. Construction of temporary haul roads to facilitate any of the above listed activities

6. The District Engineer may require an individual permit on a case-by-case basis for any activity authorized herein.

7. You must complete the authorized work within the five year issuance period of the GP. If you need additional time to complete repairs or if flood damage occurs within the last year of the GP applicants must contact the appropriate Corps District for an extension of the authorization to complete the needed work. Contact should be made at least one month in advance of the GP expiration date.

8. Flood repair activities, supervised by the U. S. Army Corps of Engineers, pursuant to Public Law 84-99, and/or supervised by the United States Department of Agriculture, pursuant to the Emergency Watershed Protection Program or the Emergency Conservation Program, do not require notification to the Corps of Engineers, Regulatory Branch. It is the responsibility of these federal agencies to comply with all environmental laws and Presidential Executive Orders.

COMPLIANCE CERTIFICATION

Special condition "a" of this permit document requires that you submit a signed certification regarding the completed work and any required mitigation. This certification page satisfies this condition if it is provided to the Kansas City District at the address shown at the bottom of this page upon completion of the project.

APPLICATION NUMBER: General Permit No. 41 (NWK 2007-02078)

APPLICANT (Enter name and mailing address):

PROJECT LOCATION (Enter latitude & longitude (decidegrees) or Section, Township and Range, County, State):

a. I certify that the authorized work was done in accordance with the Corps authorization, including any general or specific conditions.

b. I certify that any required mitigation was completed in accordance with the permit conditions.

c. Your signature below, as permittee, indicates that you have completed the authorized project as certified in paragraphs a and b above.

_____ _____

(PERMITTEE) (DATE)

Return this certification to:

U.S. Army Corps of Engineers
700 Federal Building
601 East 12th Street
Kansas City, MO 64106-2896
ATTN: OD-R